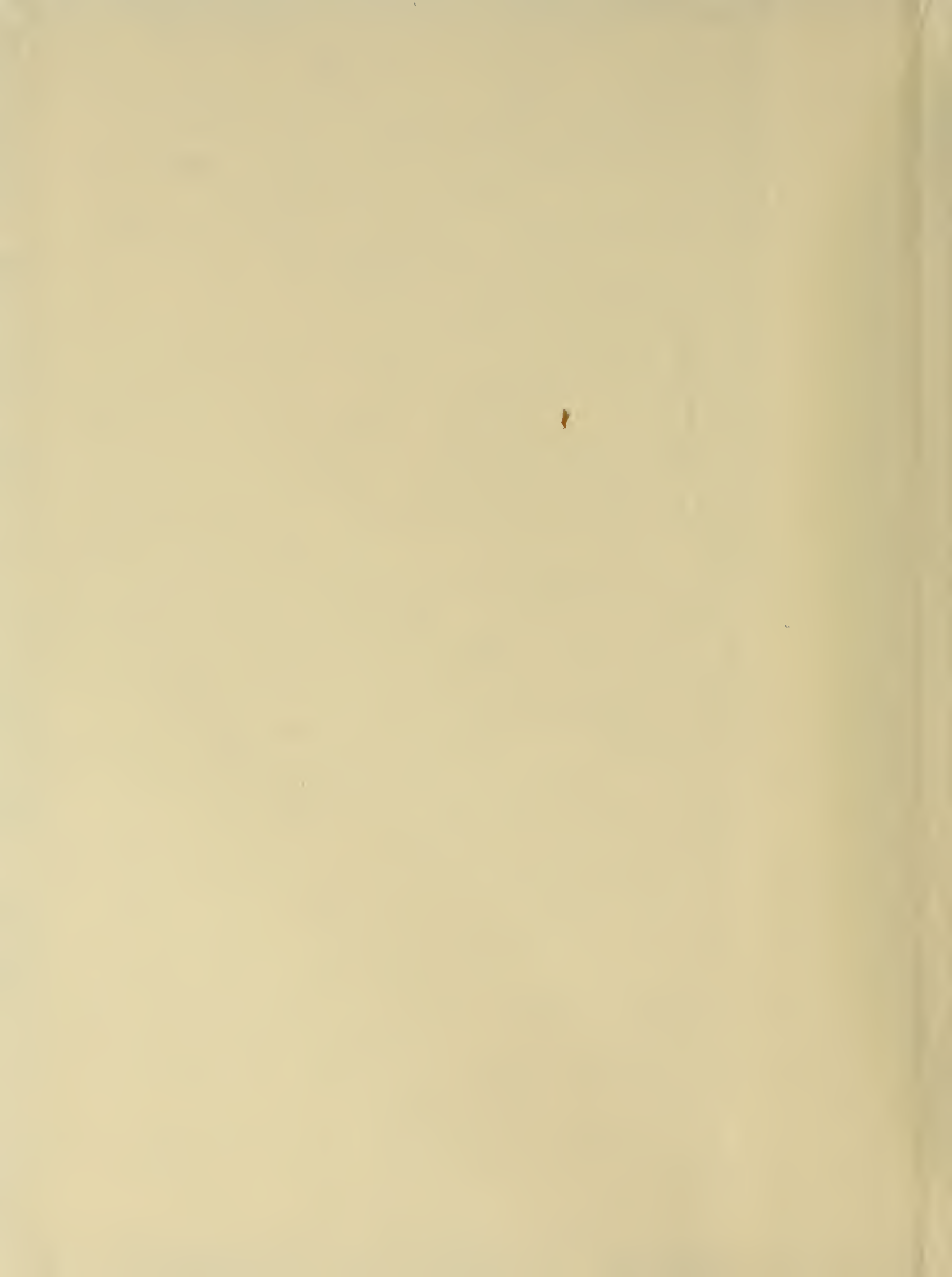


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# 1982

## Census of Construction Industries

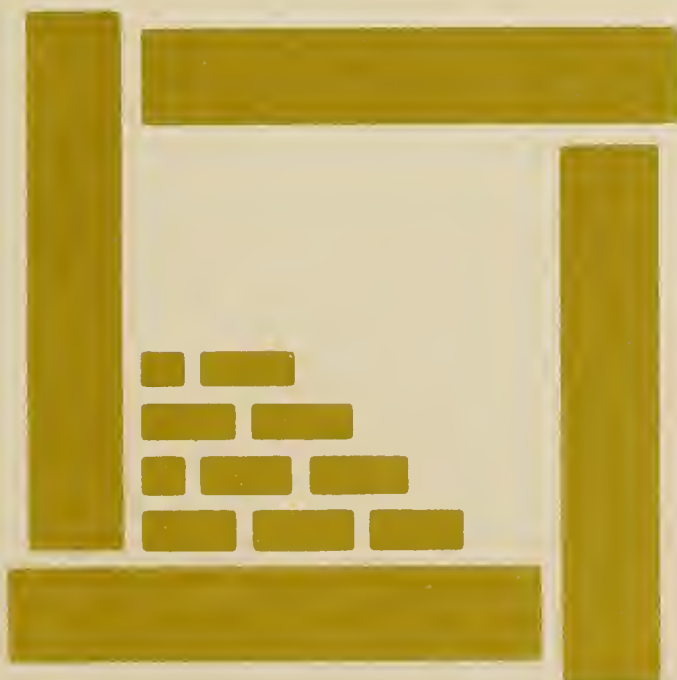
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CC82-I-26

INDUSTRY SERIES

### Special Trade Contractors, N.E.C.

Industry 1799



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The publications  
from the 1982 Economic and  
Agriculture Censuses are dedicated  
to the memory of Shirley Kallek,  
Associate Director for Economic Fields.  
During her career at the Bureau of the  
Census (1955 to 1983), she continually  
directed efforts to improve  
the timeliness and accuracy of  
economic statistics.

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FINAL REPORT  
INDUSTRY SERIES

# 1982 Census of Construction Industries

CC82-I-1 to 28  
Changed October 1986

## CHANGE SHEET

This revision is to table 4 in the original publications for Industry Series CC82-I-1 to 27 and table 8 for Industry Series C82-I-28. In the stub, change 1982 (line 8) to read 1981 and 1981 (line 12) to read 1982.



U.S. Department  
of Commerce  
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THE CENSUS



# **1982**

## **Census of Construction Industries**

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CC82-I-26

INDUSTRY SERIES

### **Special Trade Contractors, N.E.C.**

Industry 1799

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Issued December 1984



**U.S. Department of Commerce**

**Malcolm Baldrige**, Secretary

**Clarence J. Brown**, Deputy Secretary

**Sidney Jones**, Under Secretary for  
Economic Affairs

**BUREAU OF THE CENSUS**

**John G. Keane**,

Director

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Economic and Agriculture Censuses

### CONSTRUCTION DIVISION

Leonora M. Gross, Chief

**ACKNOWLEDGMENTS**—Many persons participated in the various activities of the 1982 Census of Construction Industries. Primary direction of the program was performed by **Shirley Kallek**, Associate Director for Economic Fields (until May 1983), **Charles A. Waite**, her successor, and **Michael G. Farrell**, Assistant Director for Economic and Agriculture Censuses (until August 1984), and **John H. Berry**, his successor.

This report was prepared in the Construction Statistics Division under the general direction of **Leonora M. Gross**, Chief. **Alan I. Blum**, Assistant Division Chief for Industry Surveys, was responsible for the overall management of the census of construction industries. He guided the planning and implementation of the project and coordinated activities with other divisions.

**A. William Visnansky** supervised the preparation of this report. **Barbara J. Hadden**, **Edward R. Glover**, **Otto G. Ricci**, **Marie Rustin-Sanhueza**, and **Shirley M. Baker** made important contributions in such areas as developing specifications, procedures, and resolving problems.

The computer processing system was developed and coordinated under the direction of **Barbara M. Walter**. **Richard W. Swartz** made significant contributions to the planning and development of the computer programs, and **Herbert S. Isham** was responsible for the implementation of those programs. The computer programs were also developed and written by **John Sibley**, **Clifford Jordan**, **Linda M. Mersch**, **Adele Cerrelli**, and **Dan G. Sansbury**. **Mary D. Brady** was responsible for most of the data preparation specifications and procedures. **Matthew R. Golas** was responsible for the coordination with the Computer Services Division. **Johnnye Pringle** was responsible for production control of the computer processing. Under the direction of **Jesse Pollock**, **Edward K. Ricketts** and **Dennis K. Duke** developed the sampling plans, some computer processing specifications, and quality control procedures.

Systems and procedures for mailout, receipt, correspondence, data input, industry classification, other clerical processing, administrative record processing, and quality control, along with the associated electronic computer programs, were developed in the Economic Surveys Division, **W. Joel Richardson**, Chief.

Planning, design, review, and composition of report forms were performed in the Administrative Services Division, **Robert L. Kirkland**, Chief.

Publication planning, design, editorial review, composition, and printing procurement were performed in the Publications Services Division, **Raymond J. Koski**, Chief.

Geographic coding procedures and associated computer programs were developed in the Geography Division, **Robert W. Marx**, Chief.

Mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review were performed in the Data Preparation Division, **Don L. Adams**, Chief.

Computer processing was performed in the Computer Services Division, **C. Thomas DiNenna**, Chief (until February 1984), and **John E. Halterman**, his successor.

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If you have any questions concerning the statistics in this report, call (301) 763-7546.

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## ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications<sup>1</sup> (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

## USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No.041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

## **AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES**

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

## **METHOD OF ACCOUNTING AND TIME COVERED**

For the census report, respondents could use any system of accounting by which they maintained their books. Therefore, reports could be based on cash, accrual, or completion of contract methods of accounting.

A report was supposed to cover the calendar year 1982. If that involved considerable costs, fiscal year reporting was permitted if it did not produce great differences. However, all payroll and employment figures had to be reported for the calendar year.

## **CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION**

The 1982 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots as defined in the 1972 Standard Industrial Classification (SIC) Manual.<sup>1</sup> This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

**Contract construction**—The SIC manual defines construction in three broad types of activity: (1) building construction by general contractors, (2) other construction by general contractors, and (3) construction by special trade contractors.

1. **Building construction by general contractors**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other projects of a similar character.
2. **Other construction by general contractors**—Often referred to as heavy construction contractors, these contractors are primarily engaged in the construction of highways, streets, bridges, and tunnels; docks and piers; dams and water projects; sewage collection, treatment, and disposal facilities; storm sewer systems; air fields; and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings.
3. **Construction by special trade contractors**—Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work, carpentry, etc.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

**Construction on their own account, for sale**—Operative builders are primarily engaged in constructing buildings or other structures on their own account, acting as their own general contractor. These structures are generally sold when completed. Investment builders, primarily engaged in construction on their own account for rent or lease, were not included within the scope of the construction census.

**Subdividers and developers, except cemeteries**—The SIC manual defines subdividers and developers, except cemeteries, as establishments engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.

In this system, each establishment is assigned an industry code on the basis of its major activity.

Each establishment receiving a questionnaire was requested to report the percent of total business receipts for each kind-of-business activity engaged in during 1982. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction receipts to total business receipts was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities, but in only a few instances do the SIC industry categories take into consideration combinations of activities. An example is SIC 1711, which includes establishments primarily engaged in plumbing, heating, air conditioning, ventilation, and refrigeration work. It is necessary, however, to assign a single industry code to the establishment based on its major activity.

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<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00178-0.

Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities.

The structure of the Standard Industrial Classification System makes it possible to classify or tabulate establishments by major group (two-digit), industry group (three-digit), or industry (four-digit) according to the degree of detail available and needed.

## ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business which has been established for the management of more than a single project or job and is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to, estimating, bidding, scheduling, purchasing, supervising, and operating the actual construction work being conducted at one or more construction sites.

Exceptions to the "relatively permanent office" rule were that: (1) in case of joint ventures, a separate establishment report was required covering the joint venture entity even though established to undertake only a single project; and (2) to the extent that separate legal entities were set up to carry out only a given project or part of a project, then a separate establishment report was also required for each legal entity.

To the extent that several companies shared or operated out of a single office or place of business, each such legal entity engaged in construction was considered a separate establishment and each was requested to file the necessary "establishment" report covering the activities it conducted in or from that common office.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1982.

Separate construction reports were not required for each project or construction site. Aggregated information was included in the report of the construction establishment responsible for the work of the construction projects and sites.

If an establishment engaged in two or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, construction, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1982 gross receipts from construction activities exceeded the gross receipts from each of its other activities.

An establishment is not necessarily identical with a "company" or "enterprise," which may consist of one or more establishments. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

Construction businesses with no payroll during 1982 (nonemployers) were not required to file census reports. Collection and tabulation of data for these businesses are described in the section on "Sample Design." Foreign construction activities were not included in this census.

## SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The firms included in the 1982 Census of Construction Industries were identified as part of an operation common to all 1982 Economic Censuses. Construction firms were divided into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government based on information supplied directly to the agencies.

### Employer Firms

**Developing the sampling frame for employer firms**—This operation started with obtaining a list of all construction firms in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of firms engaged in business activities in the United States. The file contains the name, address, and form of ownership of each firm and also indicates whether or not the firm is subject to the Federal Insurance Contributions Act. Each firm in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each firm. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer firms. However, for the 1982 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those firms which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment firms and large single-establishment firms. Thus, the 1982 Economic Census list for single-establishment employer firms was obtained from the IRS-SSA, but the list of establishments of multi-establishment employer companies was obtained directly from those companies in the COS.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a firm to the proper economic census, but there were a number of firms for which this information was inadequate or unavailable. A special form, NC-9923, General Report, was mailed to all such firms, requesting information on the nature of the firm's activities. From the information reported, the firm was given an industrial classification code and assigned to the appropriate economic census. Since construction firms found in this way were identified as such, only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

For 1982, some data will be published for Standard Consolidated Statistical Areas (SCSA's) and selected Standard Metropolitan Statistical Areas (SMSA's). Therefore, each establishment was assigned to an SMSA code or to the balance of a State. The balance of the State was considered to be a separate cell for the selection process. In States where none of the SMSA's had more than 500,000 inhabitants in the 1970 Decennial Census, all establishments were assigned to the balance of the State.

**Selecting the employer sample**—A construction universe of about 464,000 single establishment employer firms and 6,500 multiestablishment employers, accounting for another 13,000 construction establishments, was developed by the procedures described above. From this universe, a sample of 172,000 employer establishments was selected. This sample was generally organized by standard industrial classification (SIC) in State sequence. The sample was designed to provide publishable estimates for the most construction industries at the State and selected SMSA level. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with the payroll equivalent of 20 employees or more, and a sample of single-establishment companies with less than 20 employees. There were three SIC's for which this standard plan was not used: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

The number of establishments classified in each of these three industries is very small and consequently, all single-unit establishments in these three industries were included in the sample. For sampling purposes, the number of employees was estimated from the 1981 payroll data in the administrative records, using an industry average wage per employee. The sampling was accomplished using a systematic method within each four-digit SIC. If the SIC code for an establishment was not complete, it was sampled as part of a two-digit group (e.g., 1520 was sampled as 1500, 1620 as part of 1600) except for non-classifiable cases in two-digit group 17. These were sampled as part of 1799 which is Special Trade Contractors, Not Elsewhere Classified. For the establishments with less than 20 employees, the sample was selected by sorting the establishments into State by SMSA by SIC by payroll sequences, and drawing a systematic sample of at least two establishments within each cell, with the probability of selection being proportional to the 1981 payroll. If the State-SMSA-SIC cell had two or less establishments in the frame, all establishments were selected (a 100-percent sample). A 100-percent sample was taken of the construction firms identified from the NC-9923, General Report, and of the transfers from other census trade areas. These latter cases were identified during the processing stages. These were caused either by changes of activity in the firm since the last updating of the classification file, or errors in the mailout classification. These cases were all added to the construction census, with certainty.

**Estimation procedures for 1982 and 1977 data**—Since all larger employer firms and some smaller ones were included in the census, sample estimation was required only for the universe of firms not selected with certainty. The published statistics are the totals of the estimates for the sampled firms and the

aggregates for the certainty (larger) firms. All estimates for 1982 and 1977 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c}$$

where:  $x'_c$  is the simple unbiased estimate of a characteristic for a publication cell.

$x_i$  is the reported value of a characteristic for an individual establishment in the publication cell.

$p_i$  is the selection probability of that firm.

$n_c$  is the number of firms in the sample for the cell.

This method of estimation was used for all 1982 and 1977 characteristics. Before this formula was applied, it was necessary to convert into dollars those distributions of construction receipts which had been reported by the establishments as percentages—construction receipts by type of project, location of project, etc.

**Reliability of employer statistics**—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimates directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Although relative standard errors have been calculated for all of the published statistics, they are shown for each statistic only in the tables presenting detailed statistics. The other tables show relative standard errors only for some characteristics because of lack of space.

Separate measures of reporting and processing errors are not available. However, estimates which were subject to large errors of these types are likely to have been detected and corrected, or withheld from publication in the process of the review of the data for reasonableness and consistency. Other specific qualifications of the published data are indicated in footnotes to the tables.

The statistics in this report were based on data received by the time of final publication. Data were imputed for

establishments that did not report by that date. Selected establishments were contacted again to obtain as much information on the telephone as possible. Late data received in early 1984 were substituted for imputed data when the difference between the two was significant. Some publication cells in which more than 50 percent of the data were imputed have been suppressed.

## **Nonemployer Firms**

**General**—As described earlier, the information derived from the business income tax returns of all firms was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with firms without payroll were treated as nonemployers. The nonemployer construction firms were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return. In 1982, this group accounted for 60 percent of the total number of construction establishments, but accounted for only 8 percent of all business receipts of all construction establishments.

**Qualifications to the nonemployer data**—Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

## **CENSUS REPORT FORMS**

Information for the 1982 Census of Construction Industries was obtained from employer establishments primarily through the use of eight questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the three two-digit SIC groups (15, 16, and 17), and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted most of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were solicited from construction trade associations and appropriate advisory groups. The Census Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

## **DATA PROCESSING**

The 1982 census report forms were mailed out in December 1982. Collection of these report forms, also by mail, was essentially completed in July 1983. They were mailed from and

returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters in Washington, D.C.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding) and imputation for missing items or for the small number of reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

## **GEOGRAPHIC CLASSIFICATION**

Information for the 1982 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. Separate State codes were assigned based on this information.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected SCSA's and SMSA's.

## **DUPLICATION IN RECEIPTS**

The aggregate of construction receipts reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted to other construction firms and also be included in the subcontractors' receipts. To avoid this duplication, a "net construction receipts" figure has been derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts.

Duplication in receipts between other construction and non-construction industries results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is

defined in the 1982 Census of Construction Industries as equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, value added is defined as equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

## SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies), as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, D.C., 20233.

To discuss a special tabulation before submitting specifications, call 301-763-5435.

## RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS

The Census Bureau also conducts current surveys (monthly, quarterly, and annually) to keep abreast of the rapid changes in business conditions, new processes, new materials, and shifting demands of goods and services. The census universe provides the sampling frame, weights, and benchmarks on which some of these current surveys are based. The accuracy of the measures derived from these current surveys is directly related to the completeness of information provided in the censuses.

## COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1982 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas, the construction census figures cover both new construction and

maintenance and repair work, but only for establishments classified in the construction industry. Force account construction activity—construction work performed by the labor force of a nonconstruction company for itself, or by other entities (Federal, State, or local governments) for themselves, or by property owners for themselves—probably accounts for more than half of the difference in the data of the two series of reports. Other factors contributing to the difference are that the census data do not include: (1) the value of materials supplied by the owners of projects, (2) the value of separate architectural and engineering services and, to a lesser extent, (3) the value of construction work performed for others by firms outside the scope of construction (manufacturers who install, lumber yards and other businesses, etc.).

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology. Their effect is not fully known.

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- \* Sampling error exceeds 40 percent.
- \*\* All employees (average) is the sum of construction workers during pay period including 12th of March, May, August, and November divided by 4, added to all others, March 12th.
- Represents zero.
- † Represents total construction receipts less payments for construction work subcontracted to others. (See Duplication in Receipts.)
- †† Represents all business receipts less payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from "all business receipts." (See Duplication in Receipts.)
- ‡ Possible duplication in data. (See Duplication in Receipts.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- n.s.k. Not specified by kind.

# Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employ- ment size	By receipts size	By type, class, ownership, kind of business, and location of construction <sup>1</sup>	By speciali- zation in types of construction
Assets and depreciation (gross book value):						
Beginning of year—structures, machinery and equipment . . . . .	3					
End of year—total . . . . .	1, 3	1	5	6		
End of year—structures, machinery and equipment . . . . .	3					
Depreciation charges during the year— structures, machinery and equipment . . . . .	3					
Capital expenditures:						
Total capital expenditures . . . . .	1, 3	1	5	6		
New structures—machinery and equipment . . . . .	3					
Used structures—machinery and equipment . . . . .	3					
Communication services, payments for . . . . .	2					
Employees:						
All employees—average number . . . . .	1, 2	1	5	6		8
Construction workers—average number . . . . .	1, 2, 9					
Other employees—March . . . . .	2					
Employer costs for fringe benefits—legally required and voluntary expenditures . . . . .	2					
Establishments:						
Number in business at end of year . . . . .	2					
Number in business during the year . . . . .	1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers:						
Total . . . . .	1, 2, 9	1, 9	5	6		
Quarterly . . . . .	2, 9	9				
Inventories . . . . .	4					
Materials, components, supplies, and fuels— payments for . . . . .	1, 2	1	5	6		
Payroll:						
First quarter, all employees . . . . .	2					
Annual:						
All employees . . . . .	1, 2	1	5	6		8
Construction workers . . . . .	1, 2	1				
Other employees . . . . .	2					
Power, fuels, and lubricants—payments for . . . . .	2					
Profile of the industry—selected industry averages . . . . .	12					
Proprietors and working partners . . . . .	2					
Ratios, State . . . . .	13	13				
Receipts:						
All business receipts . . . . .	2		5	6	11	
Construction receipts, total . . . . .	1, 2, 4	1	5	6	2, 7, 10	8
For work subcontracted in from others . . . . .	2					
Other business receipts and land receipts <sup>2</sup> . . . . .	2					
Net construction receipts . . . . .	1, 2	1	5	6		8
Value added . . . . .	1, 2	1	5	6		8
Rental payments:						
Total . . . . .	1, 2	1	5	6		
For machinery and equipment . . . . .	2					
For structures . . . . .	2					
Repairs to structures and related facilities . . . . .	2					
Repairs to machinery and equipment . . . . .	2					
Storage capacity for fuels <sup>3</sup> . . . . .	2					
Subcontract work to others, payments for . . . . .	1, 2	1	5	6		8

Note: Data for 1977 and earlier years are also available in some of these tables.

<sup>1</sup>Type—buildings, roads, etc. Class—new construction or maintenance and repair work. Ownership—private or government owned.

<sup>2</sup>Other business receipts and land receipts are shown separately for SIC's 1531 and 6552 only.

<sup>3</sup>Storage capacity for fuels shown only for SIC's 1611, 1622, 1623, and 1629.



# Special Trade Contractors, N.E.C.

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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# THE UNIVERSITY OF CHICAGO

NAME		ADDRESS		CITY		STATE		COUNTRY	

# SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in construction work that could not be classified in another specific industry. This industry includes establishments doing such construction work as core or diamond drilling, scaffolding construction, house moving, fireproofing and waterproofing of buildings and other structures, sandblasting and steam cleaning of building exteriors, and other construction activities. For specific examples, refer to the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.<sup>1</sup>

During 1982, there were 20,446 establishments with payroll classified in this industry.<sup>2</sup> All business receipts of these establishments amounted to \$6.4 billion, of which \$6.1 billion were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$456 million, leaving net construction receipts of about \$5.6 billion. Value added for 1982 was \$3.7 billion. (See Introduction and appendixes for explanation of terms.)

The establishments in this industry made payments of \$2.0 billion for materials, components, and supplies purchased for use in construction work for others, purchased and subsequently provided to subcontractors for their use, purchased and then resold to others, and purchased and used in construction work for their own account. However, materials furnished to contractors by owners of projects are, of course, not included. Payments of \$173 million were also made for selected power, fuels, and

lubricants purchased during the year from other companies or received from other establishments of the parent company.

Establishments with 10 employees or more, while representing only 15 percent of the total number of employer establishments in this industry, accounted for 63 percent of all business receipts.

Total average employment in the industry showed a decrease of 1 percent from 1977 to a total of 128 thousand employees. Total payroll for 1982 amounted to \$1.8 billion. Hours worked by construction workers during the first quarter of 1982 were 35.1 million hours, while hours worked during the third quarter were 42.7 million hours.

Payments of \$345 million for employer costs for fringe benefits (not included in payroll) represent expenditures during the year for legally required and voluntary fringe benefit programs for employees—such as employers' Social Security contributions, unemployment compensation, pension plans, and welfare plans.

The 1982 estimates for establishments with payroll in all of the construction industries are based on a probability sample consisting of about 172,000 construction establishments. The estimates for this particular industry are based on a sample of about 8,900 establishments.

The statistics reported by each establishment cover all of its activities, not just construction. Therefore, aggregates of such data for an industry reflect not only the primary construction activities of the establishments in the industry, but also their secondary construction activities and any nonconstruction activities.

All data shown are based on current dollars for the years specified and have not been adjusted for price changes or inflation between 1977 and 1982.

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

<sup>2</sup>Limited data for establishments in this industry without payroll (nonemployers) will be included in the U.S. industry summary report to be published after the individual industry reports have been issued.

**Table 1. General Statistics for Establishments With Payroll by State: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see Introductory text. For explanation of terms, see appendixes]

Location of establishment	1982							
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Total construction receipts	Net construction receipts†
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States .....	20 448	127 727	102 099	1 833 071	1 331 302	157 604	6 076 411	5 620 493
Alabama .....	308	(D)	1 067	14 220	10 087	1 670	53 332	50 348
Alaska .....	87	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Arizona .....	379	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas .....	225	(D)	(D)	12 259	(D)	(D)	(D)	46 681
California .....	2 388	17 501	13 772	261 255	190 588	19 028	847 968	777 396
Colorado .....	301	1 782	1 433	28 958	20 024	2 261	89 364	84 291
Connecticut .....	267	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Delaware .....	52	297	210	4 318	3 029	339	11 829	11 608
District of Columbia .....	*18	(S)	(S)	(S)	(S)	(S)	(S)	(D)
Florida .....	1 591	9 315	7 450	120 173	87 631	11 799	457 482	406 264
Georgia .....	529	3 247	2 642	40 782	29 585	4 169	142 296	(D)
Hawaii .....	60	412	310	5 781	(D)	528	20 484	18 949
Idaho .....	92	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois .....	647	4 210	3 439	72 302	54 443	4 402	223 596	211 472
Indiana .....	373	1 755	1 399	22 198	16 355	2 134	74 931	69 912
Iowa .....	165	430	372	(D)	4 214	681	20 007	18 848
Kansas .....	193	(D)	787	(D)	(D)	(D)	(D)	39 044
Kentucky .....	241	1 215	1 002	12 859	9 607	1 393	42 644	40 594
Louisiana .....	574	6 871	5 679	137 806	86 829	10 597	387 660	350 026
Maine .....	91	889	787	19 178	18 827	(D)	46 897	46 299
Maryland .....	395	2 535	1 936	31 301	21 223	2 870	110 245	101 795
Massachusetts .....	461	2 759	2 131	39 745	29 619	3 284	143 465	133 899
Michigan .....	491	2 613	2 010	38 552	26 973	2 755	124 544	115 744
Minnesota .....	328	1 280	1 050	19 160	15 159	1 522	57 896	(D)
Mississippi .....	194	1 289	1 018	12 195	9 313	1 795	40 671	38 173
Missouri .....	364	2 044	1 602	25 874	18 806	2 143	82 871	(D)
Montana .....	75	249	198	2 824	2 435	331	11 389	10 927
Nebraska .....	128	(D)	418	5 831	4 421	650	21 546	20 330
Nevada .....	128	(D)	(D)	(D)	(D)	937	41 837	(D)
New Hampshire .....	65	(D)	347	5 776	4 074	575	19 721	18 592
New Jersey .....	714	4 263	3 486	69 690	54 233	5 400	223 871	208 674
New Mexico .....	127	744	(D)	9 267	(D)	(D)	(D)	31 473
New York .....	1 265	9 364	7 271	138 854	100 804	11 581	440 059	411 952
North Carolina .....	527	2 516	2 118	(D)	19 797	3 350	(D)	(D)
North Dakota .....	83	(D)	318	(D)	4 369	526	19 421	18 264
Ohio .....	606	3 555	2 913	50 465	37 648	4 174	169 884	160 047
Oklahoma .....	399	2 508	2 018	34 319	25 288	2 876	119 979	110 956
Oregon .....	185	647	539	9 925	7 468	726	(D)	(D)
Pennsylvania .....	700	3 670	2 888	55 528	39 884	4 288	207 286	(D)
Rhode Island .....	115	322	265	4 739	3 848	424	16 828	15 350
South Carolina .....	348	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Dakota .....	44	(S)	(S)	(S)	(S)	(S)	(S)	(D)
Tennessee .....	365	1 873	1 516	20 910	15 053	2 358	82 842	77 127
Texas .....	2 183	17 153	13 896	255 469	186 479	22 727	836 304	758 118
Utah .....	146	909	728	12 161	8 661	1 013	40 462	37 489
Vermont .....	57	297	232	3 586	2 549	421	13 911	12 841
Virginia .....	431	2 864	2 268	41 518	28 605	3 495	123 435	117 143
Washington .....	429	1 707	1 360	19 736	14 782	1 770	65 011	61 504
West Virginia .....	109	473	409	6 892	5 265	689	19 918	(D)
Wisconsin .....	286	1 278	1 018	18 744	11 966	1 340	52 363	(D)
Wyoming .....	123	542	464	6 680	5 199	658	26 229	24 956

1982—Con.						1977			Relative standard error of estimate (percent) for column—			Location of establishment
Value added††	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Rental payments for machinery, equipment, and structures	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
3 894 404	2 215 359	455 918	100 120	124 049	1 142 261	128 440	4 407 208	2 892 686	(W)	(W)	1	U.S.
32 250	22 540	2 984	910	1 486	11 143	1 493	42 864	24 665	-	10	23	Ala.
(S)	(S)	(S)	(S)	(S)	(S)	256	15 378	11 243	-	-	-	Alaska
(D)	(D)	(D)	(D)	(D)	(D)	953	101 625	55 205	-	-	-	Ariz.
(D)	18 757	(D)	647	1 229	10 427	17 537	19 893	12 049	-	17	13	Ark.
528 785	(D)	70 571	18 344	18 001	154 200		794 278	469 827	2	2	2	Calif.
51 773	(D)	5 073	(D)	(D)	17 432	2 157	84 354	40 863	8	8	-	Colo.
(D)	(D)	(D)	(D)	(D)	(D)	1 731	51 863	32 463	-	-	-	Conn.
7 381	(D)	221	225	208	3 295	197	8 384	3 364	17	13	20	Del.
(S)	(S)	(D)	(D)	(D)	(S)	211	6 339	4 137	-	-	-	D.C.
242 405	(D)	51 217	8 829	7 691	66 132	7 579	259 366	137 717	3	3	5	Fla.
84 135	(D)	(D)	1 930	2 831	24 688	3 161	88 442	53 655	6	-	9	Ga.
12 897	7 558	1 534	569	397	3 818	884	38 594	24 963	13	11	8	Hawaii
(D)	(D)	(D)	(D)	(D)	(D)	405	13 445	8 302	-	-	-	Idaho
145 330	(D)	12 124	3 580	3 960	38 721	5 415	207 679	140 092	4	3	9	Ill.
40 755	33 603	5 019	1 498	2 190	16 890	2 881	91 732	52 496	6	7	10	Ind.
(D)	(D)	1 159	203	118	1 864	859	24 710	15 069	15	17	34	Iowa
(D)	16 191	(D)	349	962	8 482	923	26 784	16 229	-	12	19	Kans.
25 391	17 719	2 049	436	809	7 396	1 417	34 609	21 477	14	11	12	Ky.
266 998	109 708	17 634	5 444	6 555	81 838	8 241	186 256	137 638	2	2	4	La.
(D)	12 475	598	535	1 065	4 944	468	14 192	7 911	8	7	5	Maine
83 892	41 694	8 449	(D)	1 991	17 496	2 477	66 682	39 563	7	6	8	Md.
80 207	(D)	9 566	1 903	(D)	21 126	2 327	79 356	43 034	6	5	-	Mass.
76 750	(D)	8 800	2 221	2 774	32 558	3 980	144 210	91 393	6	6	8	Mich.
38 696	18 116	(D)	623	1 185	13 129	1 839	62 770	42 836	8	-	10	Minn.
23 471	17 136	2 497	562	(D)	8 898	1 067	30 579	17 008	13	11	-	Miss.
48 713	(D)	(D)	805	2 782	19 977	2 575	98 670	56 152	6	-	8	Mo.
7 514	3 665	462	62	438	5 009	360	10 622	7 538	18	19	23	Mont.
13 963	8 122	1 216	(D)	835	7 402	412	13 138	7 917	-	12	13	Nebr.
(D)	16 574	(D)	(D)	(D)	3 915	1 016	41 325	23 127	-	-	-	Nev.
(D)	9 024	1 129	273	585	7 034	453	13 479	8 012	-	19	39	N.H.
139 209	77 792	14 997	2 996	4 058	33 295	3 961	124 410	76 128	4	4	8	N.J.
19 544	13 876	(D)	682	803	10 559	783	18 562	12 647	15	17	18	N. Mex.
282 493	147 163	28 107	5 664	7 497	64 607	7 216	267 314	162 618	2	2	4	N.Y.
(D)	39 138	(D)	981	1 764	21 442	2 312	56 478	35 828	8	-	13	N.C.
12 022	7 369	1 157	187	351	5 326	*520	10 221	6 751	-	10	28	N. Dak.
101 476	65 763	9 837	2 446	5 455	31 262	4 527	165 760	103 435	5	4	14	Ohio
72 823	(D)	9 023	1 886	(D)	27 113	2 266	71 505	41 668	6	5	-	Okla.
19 654	12 110	(D)	868	958	6 450	1 125	40 242	24 374	9	-	14	Oreg.
117 257	78 779	(D)	3 731	3 335	34 557	4 969	159 057	98 527	5	-	8	Pa.
9 726	5 786	1 478	309	173	2 276	476	12 149	7 503	14	14	25	R.I.
(D)	(D)	(D)	1 355	1 842	18 810	1 394	32 256	19 250	-	-	10	S.C.
(S)	(D)	(D)	(D)	(D)	(S)	295	9 477	5 804	-	-	-	S. Dak.
42 334	38 212	5 714	1 201	1 325	15 837	2 209	56 779	33 696	8	8	9	Tenn.
511 227	292 833	78 186	15 870	19 088	161 521	12 596	417 734	252 674	2	2	4	Tex.
23 168	16 767	2 973	1 023	626	9 755	787	31 366	12 883	9	10	12	Utah
8 194	5 852	1 070	186	427	3 722	234	8 093	4 987	19	22	26	Vt.
78 486	41 588	8 291	2 059	2 408	22 298	3 582	90 867	58 179	8	5	7	Va.
38 836	24 938	3 507	1 556	1 559	15 108	2 093	78 121	51 087	7	7	7	Wash.
13 323	8 169	(D)	223	434	(D)	772	20 115	12 434	13	-	33	W. Va.
(D)	20 479	(D)	1 774	1 618	13 109	2 016	77 949	58 623	11	-	4	Wis.
14 855	10 953	1 273	371	1 139	6 452	311	11 351	7 860	14	10	26	Wyo.

**Table 2. Detailed Statistics for Establishments With Payroll: 1982 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
Number of establishments in business during year .....	20 446	20 626	15 420	10 254	1	2	2	4
Number of establishments in business at end of year .....	19 839	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Proprietors and working partners .....	5 536	11 192	9 253	6 195	3	3	3	5
All employees** .....	127 727	128 440	101 294	65 481	1	1	2	1
Construction workers:								
March .....	91 693	93 499	70 748	49 351	1	1	2	2
May .....	107 455	115 011	85 060	56 472	1	1	2	2
August .....	106 087	118 204	91 680	59 450	1	1	2	2
November .....	95 737	103 153	77 909	53 492	1	1	2	2
Average .....	102 099	107 632	82 899	55 447	1	1	2	1
Other employees:								
March .....	25 458	19 445	17 370	9 718	1	1	2	3
Construction worker hours (thousands):								
January to March .....	35 072	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
April to June .....	41 825	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
July to September .....	42 692	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
October to December .....	38 014	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Total hours worked .....	157 604	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Payroll, all employees .....	1 833 071	1 383 720	826 328	408 232	1	1	1	1
Payroll, construction workers .....	1 331 302	1 085 630	635 758	329 102	1	1	2	1
Payroll, other employees .....	501 769	298 090	190 570	79 189	1	1	2	2
First quarter payroll, all employees .....	410 028	282 804	(NA)	(NA)	1	1	(NA)	(NA)
Employer costs for fringe benefits .....	344 613	263 594	(NA)	(NA)	1	1	(NA)	(NA)
Legally required expenditures .....	259 098	162 846	(NA)	(NA)	1	1	(NA)	(NA)
Voluntary expenditures .....	85 514	100 748	(NA)	(NA)	1	1	(NA)	(NA)
All business receipts .....	6 365 681	4 607 808	2 540 138	1 265 703	1	1	2	1
Total construction receipts .....	6 076 411	4 407 208	2 440 265	1 233 133	1	1	2	1
Receipts for work subcontracted in from others .....	1 975 290	1 564 606	849 910	464 991	1	1	2	2
Land receipts <sup>1</sup> .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts .....	289 270	200 600	99 873	33 014	2	2	2	3
Net construction receipts† .....	5 620 493	4 128 771	2 264 658	1 159 420	1	1	2	1
Value added†† .....	3 694 404	2 692 686	1 549 359	785 887	1	1	2	1
Selected payments .....	2 671 277	1 915 122	990 779	481 050	1	1	2	2
Materials, components, and supplies <sup>2</sup> .....	2 042 258	1 530 449	815 172	406 290	1	1	2	2
Construction work subcontracted to others .....	455 918	278 437	175 607	73 358	2	2	4	5
Selected power, fuels, and lubricants .....	173 100	106 236	(NA)	(NA)	1	1	(NA)	(NA)
Electricity .....	23 221	13 107	(NA)	(NA)	2	1	(NA)	(NA)
Natural gas .....	6 353	6 130	(NA)	(NA)	4	3	(NA)	(NA)
Gasoline and diesel fuel (including gasohol) .....	133 904	76 402	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases .....	9 620	10 600	(NA)	(NA)	3	2	(NA)	(NA)
Storage capacity for fuels <sup>3</sup> (thousand gallons) .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Rental payments for machinery, equipment, and structures .....	100 120	65 508	(NA)	(NA)	2	1	(NA)	(NA)
For machinery and equipment .....	54 768	45 111	23 975	9 757	2	1	4	5
For structures .....	45 351	20 397	(NA)	(NA)	2	2	(NA)	(NA)
Selected purchased services .....	145 634	103 637	(NA)	(NA)	1	1	(NA)	(NA)
Communication services .....	57 027	36 157	(NA)	(NA)	2	1	(NA)	(NA)
Repairs to structures and related facilities .....	9 761	5 335	(NA)	(NA)	3	2	(NA)	(NA)
Repairs to machinery and equipment .....	78 845	62 145	(NA)	(NA)	2	2	(NA)	(NA)
Ownership of construction projects:								
Total construction receipts .....	6 076 411	4 407 208	2 440 265	1 233 133	1	1	2	1
Government owned .....	498 410	545 730	446 471	(NA)	6	1	2	(NA)
Privately owned .....	5 578 000	3 861 478	1 993 794	(NA)	1	1	2	(NA)

<sup>1</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>2</sup>For 1967 and 1972, includes data for power, fuels, and lubricants.

<sup>3</sup>Data were collected only for establishments classified as heavy construction contractors.

**Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1982 and Earlier Census Years**

(Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes)

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
STRUCTURES, MACHINERY, AND EQUIPMENT								
Beginning-of-year gross book value of depreciable assets -----	1 058 714	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	124 049	119 512	64 356	28 068	2	2	4	4
New -----	89 241	94 006	51 052	22 300	2	2	4	5
Used -----	34 808	25 506	13 304	5 768	4	4	7	9
Retirements and disposition of depreciable assets -----	40 502	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	1 142 261	790 479	376 889	(NA)	2	1	3	(NA)
Depreciation charges during year -----	163 701	91 242	45 945	(NA)	2	1	3	(NA)
Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets -----	238 371	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	13 046	12 855	13 525	4 919	5	6	13	10
New structures and related facilities -----	10 920	10 046	6 772	2 898	6	5	13	8
Used structures and related facilities -----	2 125	2 809	6 753	2 021	12	8	13	13
Retirements and disposition of depreciable assets -----	3 963	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	247 454	149 916	83 146	(NA)	3	2	4	(NA)
Depreciation charges during year -----	18 442	8 140	6 656	(NA)	3	3	9	(NA)
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets -----	820 342	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	111 003	106 658	50 831	23 149	2	3	5	8
New machinery and equipment, including automobiles and trucks -----	78 320	83 961	44 280	19 402	3	2	4	5
New automobiles and trucks, intended primarily for highway use -----	40 040	46 730	(NA)	(NA)	4	2	(NA)	(NA)
Used machinery and equipment, including automobiles and trucks -----	32 683	22 697	6 551	3 747	4	4	7	11
Retirements and disposition of depreciable assets -----	36 538	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	894 807	640 563	293 743	(NA)	2	1	3	(NA)
Depreciation charges during year -----	145 259	83 102	39 289	(NA)	2	1	3	(NA)

**Table 4. Value of Inventories for Establishments With Payroll: 1982 and 1981**

(Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes)

Item	Establishments with payroll	Relative standard error of estimate (percent)
<b>All establishments:</b>		
Number .....	20 446	1
Total construction receipts .....	6 076 411	1
<b>Establishments with inventories:</b>		
Number .....	6 362	4
Total construction receipts .....	3 164 712	1
<b>Inventories<sup>1</sup>:</b>		
End of 1982, total .....	179 731	2
Value for establishments with LIFO reserve .....	10 319	2
Amount of LIFO reserve .....	3 987	6
Value for establishments with no LIFO reserve .....	169 412	2
End of 1981, total .....	182 340	2
Value for establishments with LIFO reserve .....	7 747	4
Amount of LIFO reserve .....	3 442	6
Value for establishments with no LIFO reserve .....	174 593	3
<b>Establishments with no inventories:</b>		
Number .....	14 084	1
Total construction receipts .....	2 911 699	1

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.

**Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
<b>1982</b>											
Number of establishments -----	20 446	13 426	3 970	2 001	859	123	51	11	4		1
All employees** -----	127 727	25 946	25 940	26 299	25 235	8 385	7 778	3 686	4 458	(D)	(D)
Payroll, all employees -----	1 833 071	253 414	320 598	373 934	410 950	172 630	147 802	80 143	73 600	(D)	(D)
Construction worker hours (thousands) -----	157 604	32 096	30 685	30 898	30 339	11 599	10 142	5 503	6 359	(D)	(D)
All business receipts -----	6 385 681	1 151 770	1 233 989	1 305 668	1 359 733	489 232	420 649	192 817	212 023	(D)	(D)
Total construction receipts -----	8 078 411	1 118 821	1 190 131	1 241 819	1 294 820	469 616	381 510	185 210	194 683	(D)	(D)
Net construction receipts† -----	5 820 493	1 035 829	1 084 161	1 144 228	1 187 101	440 138	359 359	369 677	(D)	(D)	(D)
Value added†† -----	3 894 404	632 715	655 757	712 741	789 273	307 945	269 918	326 055	(D)	(D)	(D)
Payments for materials, components, supplies, and fuels -----	2 215 359	438 062	472 262	495 536	462 740	151 807	126 561	38 601	31 768	(D)	(D)
Payments for construction work subcontracted to others -----	455 918	62 992	105 969	97 390	107 719	29 480	22 151	10 218	(D)	(D)	(D)
Rental payments for machinery, equipment, and structures -----	100 120	17 662	21 550	20 088	22 721	7 407	8 257	2 433	(D)	(D)	(D)
Capital expenditures, other than land -----	124 049	25 101	25 591	26 934	28 756	7 111	7 326	3 228	(D)	(D)	(D)
End-of-year gross book value of depreciable assets -----	1 142 261	239 610	259 560	229 853	229 462	54 619	77 478	20 629	31 050	(D)	(D)
<b>1977</b>											
All employees** -----	128 440	26 614	25 684	28 663	25 044	10 075	7 657	4 703	-	(D)	(D)
Total construction receipts -----	4 407 208	829 308	819 275	967 787	965 434	369 943	302 052	153 411	-	(D)	(D)
Value added†† -----	2 692 686	489 106	478 985	576 149	562 185	244 933	198 524	122 805	-	(D)	(D)
<b>1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** -----	1	2	3	2	2	(W)	(W)	(W)	(W)	-	-
Net construction receipts† -----	1	2	3	2	1	(W)	(W)	(W)	(W)	-	-
Capital expenditures, other than land -----	2	6	8	5	2	(W)	(W)	(W)	(W)	-	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

**Table 6. Selected Statistics for Establishments With Payroll by Receipts Size Class: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with all business receipts of—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1982</b>											
Number of establishments .....	20 446	(S)	(S)	3 410	5 391	2 707	1 636	838	209	72	26
All employees** .....	127 727	(S)	(S)	8 492	22 090	20 266	21 431	19 724	10 221	17 046	(D)
Payroll, all employees .....	1 833 071	(S)	(S)	67 497	236 955	257 930	316 212	349 191	206 683	360 402	(D)
Construction worker hours (thousands) .....	157 604	(S)	(S)	9 514	25 960	23 743	26 518	25 215	13 115	24 723	(D)
All business receipts .....	8 385 681	(S)	(S)	250 718	874 873	943 307	1 123 816	1 252 342	1 792 486	(D)	(D)
Total construction receipts .....	8 078 411	(S)	(S)	244 918	850 737	911 867	1 074 435	1 186 048	686 678	997 329	(D)
Net construction receipts† .....	5 820 493	(S)	(S)	233 562	799 609	849 417	991 167	1 066 426	833 736	930 327	(D)
Value added†† .....	3 894 404	(S)	(S)	145 818	492 954	515 502	608 104	700 414	429 379	729 655	(D)
Payments for materials, components, supplies, and fuels .....	2 215 359	(S)	(S)	93 543	330 790	365 354	432 243	432 306	513 508	(D)	(D)
Payments for construction work subcontracted to others .....	455 918	(S)	(S)	11 356	51 128	62 450	83 268	119 621	52 942	87 002	(D)
Rental payments for machinery, equipment, and structures .....	100 120	(S)	(S)	3 299	18 093	16 526	18 449	18 761	10 385	14 501	(D)
Capital expenditures, other than land .....	124 049	(S)	(S)	5 762	21 245	20 897	23 248	24 330	13 551	13 283	(D)
End-of-year gross book value of depreciable assets .....	1 142 261	(S)	(S)	55 922	204 312	202 276	192 818	205 476	97 274	150 854	(D)
<b>1977</b>											
All employees** .....	128 440	8 434	8 799	11 878	24 424	21 878	19 063	19 234	9 118	19 813	(NA)
Total construction receipts .....	4 407 208	52 059	122 512	276 317	716 668	761 749	754 306	852 396	414 900	1456 303	(NA)
Value added†† .....	2 692 686	32 018	76 717	169 154	427 805	445 097	450 526	524 586	269 102	1297 683	(NA)
<b>1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** .....	1	-	-	4	3	3	3	1	(W)	(W)	-
Net construction receipts† .....	1	-	-	3	3	3	3	2	(W)	(W)	-
Capital expenditures, other than land .....	2	-	-	10	7	7	7	3	(W)	(W)	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†Data for this size class include establishments with receipts of \$10,000,000 or more, which were not tabulated separately in 1977.

**Table 7. Construction Receipts for Establishments With Payroll by Type of Construction: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Construction receipts			Relative standard error of estimate (percent) for column—		
	Total	New construction <sup>1</sup>	Maintenance and repair			
	A	B	C	A	B	C
<b>1982</b>						
<b>Total construction receipts†</b> .....	<b>8 078 411</b>	<b>4 334 899</b>	<b>1 741 512</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Building construction</b> .....	<b>2 575 238</b>	<b>1 824 480</b>	<b>750 759</b>	<b>1</b>	<b>1</b>	<b>1</b>
Single-family houses .....	701 631	497 378	204 255	2	3	4
Single-family houses, detached .....	618 778	436 178	182 600	3	3	4
Single-family houses, attached .....	82 852	61 197	21 654	4	5	7
Apartment buildings with two or more apartments .....	155 813	97 916	57 897	3	3	5
Other residential buildings .....	74 018	58 567	15 450	4	5	5
Office and bank buildings .....	379 584	286 245	93 338	1	2	3
Office buildings .....	326 458	246 216	80 242	2	2	4
Bank buildings and other financial institutions .....	53 125	40 029	13 096	3	4	6
Industrial buildings and warehouses .....	601 063	418 573	182 489	2	2	3
Industrial buildings .....	509 353	349 481	159 872	2	2	4
Warehouses .....	91 710	69 092	22 617	2	3	3
Stores, restaurants, public garages, and automobile service stations .....	281 481	167 394	114 087	3	4	4
Religious buildings .....	25 902	17 127	8 775	11	15	5
Educational buildings .....	77 483	57 931	19 551	3	4	4
Hospitals and institutional buildings .....	90 031	67 973	22 057	3	3	6
Amusement, social, and recreational buildings .....	130 461	113 910	16 551	5	5	9
Other nonresidential buildings .....	57 771	41 468	16 309	10	14	9
<b>Nonbuilding construction</b> .....	<b>1 566 127</b>	<b>1 078 866</b>	<b>489 260</b>	<b>2</b>	<b>2</b>	<b>2</b>
Highways, streets, and related facilities .....	122 722	90 702	32 019	4	5	6
Outdoor swimming pools .....	433 781	368 181	65 599	3	4	5
Fencing .....	289 660	255 221	34 439	5	6	6
Sewers, water mains, and related facilities .....	61 022	49 639	11 383	5	6	9
Sewage treatment and water treatment plants .....	21 553	16 239	5 313	4	3	5
Blast furnaces, petroleum refineries, and chemical complexes .....	157 368	30 181	127 187	2	7	1
Power plants .....	82 712	56 836	25 876	2	2	4
Power plants, nuclear .....	29 956	21 824	8 131	5	3	9
Power plants, except nuclear .....	52 756	35 012	17 744	3	2	5
Other nonbuilding construction .....	397 308	209 887	187 444	6	7	8
<b>Construction work, n.s.k.</b> .....	<b>1 935 044</b>	<b>1 433 552</b>	<b>501 492</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>1977</b>						
<b>Total construction receipts†</b> .....	<b>4 407 208</b>	<b>3 327 990</b>	<b>1 079 218</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Building construction</b> .....	<b>1 831 078</b>	<b>1 279 831</b>	<b>551 247</b>	<b>1</b>	<b>1</b>	<b>1</b>
Single-family houses .....	464 272	347 168	117 104	3	4	4
Apartment buildings with two or more apartments .....	108 413	73 993	34 420	3	3	6
Other residential buildings .....	49 686	37 088	12 598	4	4	4
Office and bank buildings .....	170 187	119 585	50 602	2	2	3
Industrial buildings and warehouses .....	450 211	311 503	138 708	1	1	2
Stores, restaurants, public garages, and automobile service stations .....	256 091	139 812	116 279	2	2	4
Religious buildings .....	29 824	18 508	11 316	2	3	3
Educational buildings .....	109 184	87 482	21 702	2	2	3
Hospitals and institutional buildings .....	98 208	73 129	25 079	2	3	2
Amusement, social, and recreational buildings .....	47 037	34 435	12 602	5	5	8
Other nonresidential buildings .....	47 965	37 128	10 837	7	8	16
<b>Nonbuilding construction</b> .....	<b>1 882 292</b>	<b>1 481 400</b>	<b>400 892</b>	<b>1</b>	<b>1</b>	<b>1</b>
Highways, streets, and related facilities .....	91 535	79 178	12 357	3	3	5
Outdoor swimming pools .....	735 049	669 517	65 532	2	2	3
Fencing .....	373 698	329 306	44 392	3	3	4
Sewage treatment and water treatment plants .....	44 199	38 990	5 209	3	3	10
Blast furnaces, petroleum refineries, and chemical complexes .....	162 597	47 601	114 996	1	2	1
Power plants .....	71 282	46 558	24 724	5	5	10
Other nonbuilding construction .....	403 932	270 250	133 682	2	3	3
<b>Construction work, n.s.k.</b> .....	<b>693 904</b>	<b>566 566</b>	<b>127 338</b>	<b>2</b>	<b>3</b>	<b>2</b>

<sup>1</sup>For this industry, data for additions and alterations were not collected separately. These data are included with "New Construction."

**Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982**

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H			
<b>All establishments</b> .....	<b>20 446</b>	<b>127 727</b>	<b>1 833 071</b>	<b>6 076 411</b>	<b>4 766 790</b>	<b>5 620 493</b>	<b>3 694 404</b>	<b>455 916</b>	<b>1</b>	<b>1</b>	<b>2</b>
Establishments not specializing by type .....	1 899	19 731	336 812	1 047 215	(NA)	992 771	669 521	54 443	2	2	3
Establishments specializing 51 percent or more .....	18 547	107 996	1 496 259	5 029 196	4 766 790	4 627 721	3 024 882	401 474	1	1	2
<b>SINGLE-FAMILY HOUSES, DETACHED</b>											
<b>All establishments specializing in type</b> .....	<b>3 122</b>	<b>13 655</b>	<b>148 120</b>	<b>575 666</b>	<b>511 056</b>	<b>522 367</b>	<b>308 279</b>	<b>53 298</b>	<b>3</b>	<b>3</b>	<b>6</b>
Establishments with—											
100 percent specialization .....	1 498	5 909	63 101	249 351	249 351	226 787	134 855	22 564	5	8	13
90 to 99 percent specialization .....	537	2 464	27 559	122 672	113 560	104 755	56 991	17 917	8	7	10
80 to 89 percent specialization .....	296	1 891	21 642	74 061	81 026	68 154	43 980	5 906	9	7	4
70 to 79 percent specialization .....	498	1 911	19 450	74 418	54 845	70 536	39 251	3 880	9	10	18
60 to 69 percent specialization .....	140	919	9 443	32 077	19 783	29 514	18 503	2 563	15	10	17
51 to 59 percent specialization .....	152	559	6 923	23 088	12 488	22 620	14 697	468	15	14	17
<b>SINGLE-FAMILY HOUSES, ATTACHED</b>											
<b>All establishments specializing in type</b> .....	<b>212</b>	<b>1 101</b>	<b>11 100</b>	<b>34 058</b>	<b>27 612</b>	<b>30 062</b>	<b>18 981</b>	<b>3 996</b>	<b>16</b>	<b>13</b>	<b>19</b>
Establishments with—											
100 percent specialization .....	76	212	2 079	7 458	7 458	8 218	3 404	1 240	15	12	26
90 to 99 percent specialization .....	26	138	1 838	6 179	5 822	8 026	4 606	*153	23	16	41
80 to 89 percent specialization .....	22	86	*1 047	*3 869	*3 116	*3 590	*1 706	*278	37	45	51
70 to 79 percent specialization .....	62	523	3 659	9 853	7 365	7 840	5 194	2 013	33	25	31
60 to 69 percent specialization .....	*14	*48	*728	2 532	*1 519	2 532	*1 404	-	42	39	-
51 to 59 percent specialization .....	*11	*93	*1 749	*4 166	*2 330	*3 855	*2 665	*311	48	48	64
<b>APARTMENT BUILDINGS WITH TWO OR MORE APARTMENTS</b>											
<b>All establishments specializing in type</b> .....	<b>169</b>	<b>1 469</b>	<b>21 003</b>	<b>66 629</b>	<b>54 020</b>	<b>59 411</b>	<b>42 935</b>	<b>7 418</b>	<b>10</b>	<b>7</b>	<b>4</b>
Establishments with—											
100 percent specialization .....	70	509	6 324	15 918	15 918	15 101	11 704	817	16	17	17
90 to 99 percent specialization .....	*12	*87	*711	*2 063	*1 891	*1 862	*1 321	*201	63	48	70
80 to 89 percent specialization .....	41	179	3 016	12 693	10 575	9 867	6 403	2 826	18	11	5
70 to 79 percent specialization .....	43	481	8 036	26 674	19 872	24 964	18 114	1 710	19	12	4
60 to 69 percent specialization .....	18	203	2 666	8 201	5 059	6 657	4 488	1 544	16	12	4
51 to 59 percent specialization .....	5	(S)	(S)	(S)	(S)	(S)	(S)	(S)	-	-	-
<b>OTHER RESIDENTIAL BUILDINGS</b>											
<b>All establishments specializing in type</b> .....	<b>36</b>	<b>323</b>	<b>5 167</b>	<b>18 595</b>	<b>12 542</b>	<b>15 433</b>	<b>10 307</b>	<b>1 182</b>	<b>17</b>	<b>13</b>	<b>38</b>
Establishments with—											
100 percent specialization .....	*13	*90	*799	*3 484	*3 484	*2 903	1 108	(S)	50	57	-
90 to 99 percent specialization .....	*12	*29	*231	*1 527	*1 411	*1 284	*736	*243	60	55	71
80 to 89 percent specialization .....	5	74	1 205	4 222	3 377	3 960	2 918	262	23	11	7
70 to 79 percent specialization .....	*3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
60 to 69 percent specialization .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
51 to 59 percent specialization .....	4	81	1 941	5 715	3 128	5 659	4 357	56	(W)	(W)	(W)
<b>INDUSTRIAL BUILDINGS</b>											
<b>All establishments specializing in type</b> .....	<b>702</b>	<b>6 263</b>	<b>135 465</b>	<b>376 167</b>	<b>331 908</b>	<b>354 177</b>	<b>280 794</b>	<b>23 990</b>	<b>3</b>	<b>2</b>	<b>4</b>
Establishments with—											
100 percent specialization .....	440	5 386	82 614	230 919	230 919	213 186	171 536	17 733	3	3	4
90 to 99 percent specialization .....	48	313	6 195	16 703	15 399	15 193	11 802	1 510	20	16	21
80 to 89 percent specialization .....	82	506	7 177	22 805	18 473	21 967	13 681	838	14	12	21
70 to 79 percent specialization .....	46	535	10 227	31 518	22 705	29 685	19 430	1 833	10	8	11
60 to 69 percent specialization .....	72	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
51 to 59 percent specialization .....	14	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
<b>OFFICE BUILDINGS</b>											
<b>All establishments specializing in type</b> .....	<b>233</b>	<b>3 740</b>	<b>80 222</b>	<b>207 868</b>	<b>153 510</b>	<b>199 719</b>	<b>154 454</b>	<b>6 148</b>	<b>3</b>	<b>3</b>	<b>12</b>
Establishments with—											
100 percent specialization .....	59	394	6 792	20 232	20 232	18 305	13 262	*1 927	11	14	46
90 to 99 percent specialization .....	17	298	8 881	15 917	14 709	15 682	14 800	235	15	6	6
80 to 89 percent specialization .....	65	511	11 687	30 803	24 964	28 569	19 248	2 234	9	7	32
70 to 79 percent specialization .....	34	1 185	26 708	69 759	52 067	67 523	53 057	2 236	4	3	1
60 to 69 percent specialization .....	38	657	15 666	41 330	25 642	40 787	32 282	543	7	8	26
51 to 59 percent specialization .....	19	894	12 488	29 826	15 894	28 852	21 803	973	5	5	5
<b>STORES, RESTAURANTS, PUBLIC GARAGES, AND AUTOMOBILE SERVICE STATIONS</b>											
<b>All establishments specializing in type</b> .....	<b>578</b>	<b>3 662</b>	<b>59 751</b>	<b>198 339</b>	<b>188 993</b>	<b>176 547</b>	<b>111 928</b>	<b>21 792</b>	<b>5</b>	<b>5</b>	<b>6</b>
Establishments with—											
100 percent specialization .....	452	2 843	47 577	157 187	157 187	140 049	87 737	17 138	7	5	8
90 to 99 percent specialization .....	20	202	3 812	10 932	10 261	9 078	6 502	1 854	22	9	24
80 to 89 percent specialization .....	65	279	3 041	12 239	9 791	11 055	5 985	1 183	25	26	38
70 to 79 percent specialization .....	*20	*70	*814	*6 337	*4 683	*6 174	*4 951	*163	45	71	55
60 to 69 percent specialization .....	*15	207	(D)	(D)	(D)	(D)	4 986	(D)	8	-	-
51 to 59 percent specialization .....	3	81	(D)	(D)	(D)	(D)	1 766	(D)	(W)	-	-
<b>EDUCATIONAL BUILDINGS</b>											
<b>All establishments specializing in type</b> .....	<b>48</b>	<b>237</b>	<b>4 081</b>	<b>14 495</b>	<b>9 326</b>	<b>13 995</b>	<b>7 570</b>	<b>500</b>	<b>13</b>	<b>14</b>	<b>28</b>
Establishments with—											
100 percent specialization .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
90 to 99 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-
80 to 89 percent specialization .....	3	33	563	2 053	1 642	2 025	t 440	28	27	27	32
70 to 79 percent specialization .....	*6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
60 to 69 percent specialization .....	*7	81	1 373	*3 250	*1 950	*3 184	t 381	*66	21	44	45
51 to 59 percent specialization .....	28	100	1 528	4 759	2 817	4 354	2 956	405	30	30	35

**Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982—Con.**

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
<b>HOSPITALS AND INSTITUTIONAL BUILDINGS</b>											
All establishments specializing in type .....	26	258	3 493	9 478	7 179	9 115	5 419	363	17	15	9
Establishments with—											
100 percent specialization .....	*13	130	1 559	3 074	3 074	2 717	2 399	357	20	25	9
90 to 99 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-
80 to 89 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-
70 to 79 percent specialization .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
60 to 69 percent specialization .....	*2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
51 to 59 percent specialization .....	*10	*50	*300	*2 000	*1 100	*2 000	*895	-	63	71	-
<b>HIGHWAYS, STREETS, AND RELATED FACILITIES</b>											
All establishments specializing in type .....	175	1 737	29 097	96 423	90 326	91 103	52 964	5 320	8	6	12
Establishments with—											
100 percent specialization .....	155	1 330	19 811	66 245	66 245	62 492	34 852	3 753	8	7	17
90 to 99 percent specialization .....	*7	136	4 313	(D)	(D)	(D)	(D)	(D)	19	-	-
80 to 89 percent specialization .....	5	87	2 053	7 122	5 909	6 036	3 702	1 084	(W)	(W)	(W)
70 to 79 percent specialization .....	4	82	1 481	5 165	3 866	4 847	5 589	318	(W)	(W)	(W)
60 to 69 percent specialization .....	*4	*100	1 659	(D)	(D)	(D)	(D)	(D)	45	-	-
51 to 59 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-
<b>OUTDOOR SWIMMING POOLS</b>											
All establishments specializing in type .....	1 188	8 293	108 461	434 213	428 478	362 438	206 778	71 775	4	4	12
Establishments with—											
100 percent specialization .....	1 081	7 643	101 721	403 369	403 369	337 701	191 830	65 668	4	4	13
90 to 99 percent specialization .....	23	123	2 240	13 585	12 841	9 869	6 262	*3 716	26	33	60
80 to 89 percent specialization .....	68	*348	2 004	8 830	7 347	8 280	5 320	*550	41	28	45
70 to 79 percent specialization .....	*4	*44	*444	*1 261	*882	*1 111	*367	*150	60	56	56
60 to 69 percent specialization .....	*5	*25	*485	*2 290	*1 396	*1 315	465	*975	57	62	56
51 to 59 percent specialization .....	9	109	1 567	4 878	2 641	*4 162	2 533	716	29	36	20
<b>FENCING</b>											
All establishments specializing in type .....	1 108	6 820	79 081	278 913	275 820	269 131	152 591	9 782	5	5	7
Establishments with—											
100 percent specialization .....	1 058	8 201	72 118	254 830	254 830	246 050	136 250	8 780	5	6	7
90 to 99 percent specialization .....	26	319	4 438	14 183	13 600	13 750	7 995	433	20	21	23
80 to 89 percent specialization .....	*8	*85	*859	*2 581	*2 276	*2 537	*2 479	*44	53	55	56
70 to 79 percent specialization .....	*12	*190	1 131	5 223	3 781	4 881	2 814	*342	53	38	58
60 to 69 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-
51 to 59 percent specialization .....	3	24	535	2 096	1 131	1 913	1 053	183	26	21	24
<b>SEWERS, SEWER LINES, AND RELATED FACILITIES</b>											
All establishments specializing in type .....	35	209	2 604	8 769	7 181	8 455	5 919	314	26	23	32
Establishments with—											
100 percent specialization .....	*10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
90 to 99 percent specialization .....	*13	85	1 018	3 072	2 773	2 883	2 076	*189	35	33	44
80 to 89 percent specialization .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
70 to 79 percent specialization .....	*11	82	1 014	3 926	2 870	3 866	2 484	*60	39	36	53
60 to 69 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-
51 to 59 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-
<b>BLAST FURNACES, PETROLEUM REFINERIES, AND CHEMICAL COMPLEXES</b>											
All establishments specializing in type .....	86	3 772	81 037	156 783	140 233	149 262	133 692	7 521	3	4	1
Establishments with—											
100 percent specialization .....	81	2 582	53 338	103 181	103 161	96 959	82 175	6 202	9	8	1
90 to 99 percent specialization .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
80 to 89 percent specialization .....	8	242	3 517	11 008	8 831	10 419	7 476	589	12	20	24
70 to 79 percent specialization .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
60 to 69 percent specialization .....	12	801	(D)	34 252	21 779	34 246	38 566	6	2	1	(W)
51 to 59 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-

**Table 9. Quarterly Construction Worker Hours and Employment for Establishments With**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
	A	B	C	D	E	F	G
<b>United States .....</b>	<b>20 446</b>	<b>102 099</b>	<b>157 604</b>	<b>91 893</b>	<b>35 072</b>	<b>107 455</b>	<b>41 825</b>
Alabama .....	308	1 087	1 670	971	364	1 207	496
Alaska .....	87	(S)	(S)	(S)	(S)	(S)	(S)
Arizona .....	379	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas .....	225	(D)	(D)	(D)	(D)	(D)	(D)
California .....	2 388	13 772	19 028	12 888	4 431	14 801	5 070
Colorado .....	301	1 433	2 261	1 353	538	1 503	614
Connecticut .....	267	(D)	(D)	(D)	(D)	(D)	(D)
Delaware .....	52	210	339	208	56	225	87
District of Columbia .....	*18	(S)	(S)	(S)	(S)	(S)	(S)
Florida .....	1 591	7 450	11 799	7 335	2 885	7 692	3 125
Georgia .....	529	2 642	4 169	2 442	937	2 609	1 066
Hawaii .....	60	310	528	315	135	310	130
Idaho .....	92	(D)	(D)	(D)	(D)	(D)	(D)
Illinois .....	647	3 439	4 402	2 704	859	3 764	1 176
Indiana .....	373	1 399	2 134	1 142	434	1 529	593
Iowa .....	165	372	681	291	130	391	188
Kansas .....	193	787	(D)	825	(D)	821	314
Kentucky .....	241	1 002	1 393	917	292	1 121	418
Louisiana .....	574	5 879	10 597	5 187	2 353	5 053	2 296
Maine .....	91	787	(D)	715	(D)	971	(D)
Maryland .....	395	1 936	2 870	1 671	633	2 132	809
Massachusetts .....	461	2 131	3 284	1 571	612	2 446	941
Michigan .....	491	2 010	2 755	1 395	464	2 203	735
Minnesota .....	328	1 050	1 522	696	263	1 056	387
Mississippi .....	194	1 016	1 795	957	(D)	1 067	471
Missouri .....	364	1 602	2 143	1 431	457	1 695	609
Montana .....	75	198	331	158	64	186	91
Nebraska .....	128	418	650	332	121	429	177
Nevada .....	128	(D)	937	(D)	(D)	(D)	(D)
New Hampshire .....	65	347	575	218	92	360	149
New Jersey .....	714	3 486	5 400	2 588	1 008	3 816	1 467
New Mexico .....	127	(D)	(D)	(D)	(D)	(D)	(D)
New York .....	1 265	7 271	11 581	5 931	2 311	7 729	3 077
North Carolina .....	527	2 118	3 350	1 939	745	2 247	915
North Dakota .....	83	316	526	229	95	324	140
Ohio .....	606	2 913	4 174	2 494	903	3 076	1 116
Oklahoma .....	399	2 018	2 878	2 035	694	2 174	780
Oregon .....	185	539	726	463	152	581	200
Pennsylvania .....	700	2 888	4 288	2 393	860	3 176	1 180
Rhode Island .....	115	265	424	210	95	310	125
South Carolina .....	348	(D)	(D)	(D)	(D)	(D)	(D)
South Dakota .....	44	(S)	(S)	(S)	(S)	(S)	(S)
Tennessee .....	365	1 518	2 358	1 331	516	1 619	672
Texas .....	2 183	13 896	22 727	13 952	5 647	14 471	5 915
Utah .....	146	728	1 013	672	239	790	263
Vermont .....	57	232	421	139	66	243	118
Virginia .....	431	2 268	3 495	2 128	789	2 303	934
Washington .....	429	1 360	1 770	1 291	396	1 432	506
West Virginia .....	109	409	689	333	140	397	174
Wisconsin .....	288	1 018	1 340	683	(D)	1 058	371
Wyoming .....	123	464	658	449	172	550	186

<sup>1</sup>Sum of construction workers during pay periods including 12th of March, May, August, and November.

# Payroll by State: 1982

July to September		October to December		Relative standard error of estimate (percent) for column—										Location of establishment
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)	B	C	D	E	F	G	H	I	J	K	
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
106 087	42 692	95 737	38 014	(W)	(W)	1	1	1	1	1	1	1	1	U.S.
1 065	445	871	383	11	11	13	14	11	14	11	13	10	13	Ala.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	Alaska
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	Ariz.
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	Ark.
13 744	4 956	12 866	4 570	3	2	3	3	4	3	2	3	3	3	Calif.
1 465	611	1 232	496	8	8	7	8	7	8	6	8	7	9	Colo.
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	Conn.
218	83	185	111	21	19	25	24	20	22	19	19	22	37	Del.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	D.C.
7 397	3 091	8 895	2 695	3	3	3	4	3	4	3	4	4	4	Fla.
2 806	1 155	2 499	1 009	8	6	6	7	8	7	6	7	7	8	Ga.
304	135	289	128	10	11	12	16	10	13	10	14	11	13	Hawaii
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	Idaho
3 991	1 295	3 131	1 071	4	4	3	5	4	5	4	5	4	5	Ill.
1 535	812	1 273	493	6	7	6	9	7	9	7	9	6	8	Ind.
404	186	325	175	15	17	17	24	14	20	16	21	17	23	Iowa
769	(D)	652	(D)	10	-	11	-	12	13	11	-	11	-	Kans.
1 047	385	803	295	15	11	16	14	13	14	17	14	16	14	Ky.
5 047	2 405	7 314	3 542	2	2	3	2	3	3	2	2	1	1	La.
929	(D)	424	(D)	7	4	6	5	6	4	6	4	11	10	Maine
2 071	768	1 774	658	9	7	6	8	9	8	10	8	9	8	Md.
2 350	929	1 964	801	6	6	5	7	7	7	7	8	6	8	Mass.
2 268	829	2 072	725	6	6	7	9	7	8	7	7	6	7	Mich.
1 210	462	1 101	408	8	9	9	13	9	11	9	12	9	12	Minn.
1 046	(D)	951	426	11	12	11	-	12	14	11	-	12	14	Miss.
1 672	568	1 499	507	7	7	7	10	7	9	8	9	8	11	Mo.
248	108	163	66	18	20	18	27	19	29	19	27	18	27	Mont.
422	188	409	162	14	15	16	23	15	18	13	16	15	19	Nebr.
(D)	(D)	(D)	(D)	-	11	-	-	-	-	-	-	-	-	Nev.
383	168	382	165	19	19	19	23	18	22	19	21	21	23	N.H.
3 983	1 596	3 326	1 327	4	5	4	6	4	6	4	5	4	5	N.J.
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	N. Mex.
8 122	3 320	6 917	2 871	2	2	2	3	3	3	3	3	2	3	N.Y.
2 236	928	1 892	760	8	8	8	10	8	10	8	9	8	10	N.C.
351	163	274	126	14	13	20	23	14	19	14	15	14	16	N. Dak.
3 128	1 156	2 713	998	5	5	5	7	6	7	6	6	5	7	Ohio
1 919	734	1 797	667	6	6	8	8	7	8	6	8	7	8	Okla.
549	204	494	169	9	9	9	13	10	13	9	13	9	14	Oreg.
3 020	1 180	2 691	1 068	5	5	5	6	6	7	5	7	5	7	Pa.
251	110	242	94	15	16	15	22	15	21	17	23	17	24	R.I.
(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-	-	S.C.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	S. Dak.
1 543	641	1 389	527	8	8	8	10	8	10	8	9	8	9	Tenn.
14 116	6 041	12 434	5 122	2	2	2	3	2	2	2	3	3	3	Tex.
784	281	590	229	10	10	10	14	10	13	10	13	12	13	Utah
300	137	221	99	19	22	26	37	19	24	21	24	17	25	Vt.
2 389	956	2 118	815	6	6	6	8	6	8	6	7	6	8	Va.
1 430	495	1 097	372	7	8	7	11	8	11	9	12	8	11	Wash.
440	194	423	180	13	14	11	16	13	16	17	21	17	20	W. Va.
1 138	398	1 050	(D)	12	10	13	-	12	12	13	12	14	-	Wis.
460	174	328	125	15	14	19	18	17	17	15	17	15	19	Wyo.

**Table 10. Construction Receipts for Establishments With Payroll by Location of Construction Work: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1982					1977 construction receipts for work done in this State	Percent change 1982/ 1977 (col A ÷ F)	Relative standard error of estimate (percent) for column—		
	Construction receipts for work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Construction receipts	Number	Construction receipts					
A	B	C	D	E	F	G	A	C	E	
United States .....	6 076 411	19 979	5 465 298	4 246	611 112	4 407 208	37.9	1	1	
Alabama .....	58 007	300	46 904	94	11 102	41 980	38.2	9	12	9
Alaska .....	13 758	67	(D)	*9	(D)	18 214	-24.5	7	-	-
Arizona .....	129 586	375	126 944	30	2 842	104 804	23.6	5	6	8
Arkansas .....	42 196	219	40 889	30	*1 306	24 485	72.3	20	20	42
California .....	842 594	2 380	832 080	92	10 514	782 710	7.7	2	2	8
Colorado .....	99 633	299	85 071	92	14 561	62 528	59.3	5	6	5
Connecticut .....	84 280	264	73 806	91	10 474	49 856	69.0	5	6	14
Delaware .....	31 636	51	10 543	66	21 093	9 362	237.9	9	13	11
District of Columbia .....	28 611	18	*2 307	139	26 304	13 791	107.5	5	41	4
Florida .....	451 107	1 548	442 892	107	8 215	259 743	73.7	3	3	8
Georgia .....	140 498	514	132 346	117	8 152	84 933	65.4	6	8	12
Hawaii .....	23 121	59	20 109	22	3 012	39 408	-41.3	11	12	21
Idaho .....	17 393	92	12 431	76	4 962	16 772	3.7	16	18	35
Illinois .....	200 847	639	188 519	210	12 327	214 421	-6.3	4	4	8
Indiana .....	82 179	353	68 090	163	14 088	85 750	-4.2	7	8	14
Iowa .....	27 379	163	17 567	147	9 812	32 448	-15.6	12	18	20
Kansas .....	46 700	191	36 903	78	9 796	36 853	26.7	12	15	9
Kentucky .....	50 119	234	39 042	165	11 076	35 796	40.0	9	11	16
Louisiana .....	344 201	558	304 888	87	39 312	193 329	78.0	2	2	3
Maine .....	47 504	85	39 600	50	7 904	15 677	203.0	7	5	36
Maryland .....	119 187	395	88 939	133	30 248	72 167	65.2	5	7	3
Massachusetts .....	172 069	459	132 157	135	39 911	84 989	102.5	5	6	5
Michigan .....	123 228	485	116 652	68	6 575	151 938	-18.9	6	6	15
Minnesota .....	58 804	317	51 221	49	7 583	55 520	5.9	8	9	13
Mississippi .....	47 106	178	36 886	79	10 219	34 487	36.6	9	12	10
Missouri .....	86 530	354	72 651	102	13 878	68 794	25.8	6	8	10
Montana .....	14 510	74	9 782	21	4 727	19 463	-25.4	18	20	37
Nebraska .....	22 347	128	19 384	20	*2 962	17 096	30.7	13	14	48
Nevada .....	46 420	126	39 964	49	6 456	44 302	4.8	10	11	10
New Hampshire .....	18 262	64	11 888	67	6 374	11 016	65.8	17	24	22
New Jersey .....	195 897	677	169 177	149	26 719	128 684	52.2	4	5	3
New Mexico .....	36 670	126	31 855	52	4 815	21 383	71.5	15	17	9
New York .....	437 385	1 235	385 447	142	51 937	253 467	72.6	3	4	3
North Carolina .....	96 357	512	85 482	86	10 874	58 153	65.7	7	8	9
North Dakota .....	19 335	82	17 269	18	2 065	13 793	40.2	10	12	2
Ohio .....	159 230	569	148 283	96	10 947	157 050	1.4	4	5	4
Oklahoma .....	120 863	378	109 676	69	11 188	75 096	60.9	5	6	9
Oregon .....	30 131	180	28 793	37	1 337	46 904	-35.8	9	9	15
Pennsylvania .....	175 584	673	156 307	145	19 277	137 277	27.9	5	6	9
Rhode Island .....	16 005	113	12 596	56	3 409	12 952	23.6	17	21	8
South Carolina .....	63 743	330	58 009	74	5 733	38 303	66.4	7	8	14
South Dakota .....	8 007	44	(D)	15	(D)	10 756	-25.6	11	-	-
Tennessee .....	80 777	364	76 169	60	4 608	63 029	28.2	8	8	12
Texas .....	815 875	2 145	772 952	119	42 922	400 925	103.5	2	2	1
Utah .....	37 489	141	33 867	15	3 621	30 578	22.6	12	9	25
Vermont .....	14 895	55	11 365	31	3 529	8 580	73.6	21	26	28
Virginia .....	124 462	423	104 653	139	19 808	78 387	58.8	5	6	5
Washington .....	67 457	428	62 525	54	4 932	68 836	-2.0	7	7	6
West Virginia .....	24 972	99	16 847	122	8 125	28 502	-12.4	10	12	12
Wisconsin .....	49 724	284	45 079	81	4 644	75 360	-34.0	9	10	6
Wyoming .....	31 717	119	21 367	88	10 349	16 820	88.6	9	13	7

**Table 11. All Business Receipts for Establishments With Payroll by Kind of Business Activity: 1982 and 1977**

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	All business receipts		Relative standard error of estimate (percent)	
	1982	1977	1982	1977
<b>All kinds of business</b> .....	<b>6 385 681</b>	<b>4 607 808</b>	<b>1</b>	<b>1</b>
General building contractor .....	40 773	213 781	11	4
Heavy construction contractor .....	211 014	31 813	3	11
Carpentry contractor .....	17 387	(NA)	12	(NA)
Concrete contractor .....	30 572	(NA)	7	(NA)
Electrical contractor .....	18 089	(NA)	11	(NA)
Excavating and earthmoving contractor .....	11 481	(NA)	9	(NA)
Fencing contractor .....	967 678	681 397	3	2
Insulation contractor .....	34 501	(NA)	13	(NA)
Iron work contractor .....	422 817	572 544	2	2
Masonry contractor, brickwork .....	18 201	(NA)	8	(NA)
Millwright .....	35 570	39 425	13	9
Painting contractor .....	26 316	(NA)	5	(NA)
Plumbing contractor .....	10 769	(NA)	13	(NA)
Residential remodeling contractor .....	39 773	21 033	11	10
Roofing contractor .....	17 473	(NA)	14	(NA)
Siding contractor .....	10 708	(NA)	26	(NA)
Structural steel erection contractor .....	36 037	34 060	2	2
Swimming pool contractor .....	989 630	726 713	2	2
Water well drilling contractor .....	12 763	(NA)	22	(NA)
Sandblasting contractor .....	109 388	66 352	4	5
Scaffolding construction contractor .....	43 253	86 540	4	1
Drilling test borings for building construction contractor .....	56 546	87 764	8	4
Retail trade .....	103 956	82 802	3	3
Wholesale trade .....	29 703	35 714	5	9
Other activities .....	3 071 283	1 624 266	8	1

**Table 12. Profile of Establishments With Payroll in This Industry: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	1982	1977	1972	Relative standard error of estimate (percent) for 1982
<b>AVERAGE PER ESTABLISHMENT</b>				
Number of employees**	6.3	6.2	6.6	1
Number of construction workers	5.0	5.2	5.4	1
Number of all other employees	1.3	.9	1.1	1
Payroll, all employees	\$1,000 89.7	67.1	53.6	1
Construction worker wages	do 65.1	52.6	41.2	1
Other employee salaries	do 24.5	14.5	12.4	1
All business receipts	do 311.3	223.4	164.7	1
Total construction receipts	do 297.2	213.7	158.3	1
Payments for materials, components, supplies, and fuels	do 108.4	79.4	52.9	1
Construction work subcontracted to others	do 22.3	13.5	11.4	2
Capital expenditures, other than land	do 6.1	5.8	4.2	2
Gross book value of depreciable assets	do 55.9	38.3	24.4	2
<b>AVERAGE PER EMPLOYEE</b>				
Payroll, all employees	do 14.4	10.8	8.2	1
All business receipts	do 49.8	35.9	25.1	1
Value added††	do 28.9	21.0	15.3	1
<b>AVERAGE PER CONSTRUCTION WORKER</b>				
Construction worker wages	do 13.0	10.1	7.7	1
Total construction receipts	do 59.5	41.0	29.4	1
Construction worker hours	thousand 1.5	(NA)	(NA)	1
<b>AVERAGE PER OTHER EMPLOYEE</b>				
Other employee salaries	\$1,000 19.7	15.3	11.0	1
<b>AVERAGE PER DOLLAR OF TOTAL CONSTRUCTION RECEIPTS</b>				
Payroll, all employees	.302	.314	.339	1
Payments for materials, components, supplies, and fuels	.365	.371	.334	1
Payments for construction work subcontracted to others	.075	.063	.074	2
Capital expenditures, other than land	.020	.027	.026	2
Rental payments for machinery, equipment, and structures	.016	.015	(NA)	2

**Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker (thousands)	Total construction receipts per construction worker (\$1,000)	Average per dollar of total construction receipts				
					Payroll, all employees	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures
<b>United States -----</b>	<b>6.2</b>	<b>14.4</b>	<b>1.5</b>	<b>59.5</b>	<b>.302</b>	<b>.365</b>	<b>.075</b>	<b>.020</b>	<b>.016</b>
Alabama -----	(D)	(D)	1.6	50.0	.267	.423	.058	.028	.017
Alaska -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Arizona -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.013
California -----	7.3	14.9	1.4	61.6	.308	(D)	.083	.019	.022
Colorado -----	5.9	15.1	1.6	62.4	.302	(D)	.057	(D)	(D)
Connecticut -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Delaware -----	5.7	14.5	1.6	56.3	.365	(D)	.019	.016	.019
District of Columbia -----	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(D)	(D)
Florida -----	5.9	12.9	1.6	61.4	.263	(D)	.112	.017	.015
Georgia -----	6.1	12.6	1.6	53.9	.287	(D)	(D)	.020	.014
Hawaii -----	6.9	14.0	1.7	66.1	.282	.389	.075	.019	.026
Idaho -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois -----	6.5	17.2	1.3	65.0	.323	(D)	.054	.018	.016
Indiana -----	4.7	12.6	1.5	53.6	.296	.448	.067	.029	.020
Iowa -----	2.6	(D)	1.8	53.6	(D)	(D)	.058	.006	.010
Kansas -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kentucky -----	5.0	10.8	1.4	42.6	.302	.416	.048	.019	.010
Louisiana -----	12.0	20.1	1.9	64.7	.375	.296	.048	.016	.015
Maine -----	9.6	21.6	2.9	61.1	.409	.266	.013	.023	.011
Maryland -----	6.4	12.3	1.5	56.9	.284	.378	.077	.016	(D)
Massachusetts -----	6.0	14.4	1.5	67.3	.277	(D)	.067	(D)	.013
Michigan -----	5.3	14.6	1.4	62.0	.310	(D)	.071	.022	.018
Minnesota -----	3.9	15.0	1.4	55.1	.331	.313	(D)	.020	.011
Mississippi -----	6.6	9.5	1.6	40.0	.300	.421	.061	(D)	.014
Missouri -----	5.6	12.7	1.3	51.7	.312	(D)	(D)	.034	.010
Montana -----	3.3	11.3	1.7	57.5	.248	.322	.041	.038	.005
Nebraska -----	(D)	(D)	1.6	51.5	.271	.377	.056	.039	(D)
Nevada -----	(D)	(D)	(D)	(D)	(D)	.396	(D)	(D)	(D)
New Hampshire -----	(D)	12.1	1.7	56.6	.293	.458	.057	.030	.014
New Jersey -----	6.0	16.3	1.5	64.2	.312	.348	.067	.016	.013
New Mexico -----	5.9	12.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New York -----	7.4	14.6	1.6	60.5	.316	.334	.064	.017	.013
North Carolina -----	4.6	(D)	1.6	(D)	(D)	(D)	(D)	(D)	(D)
North Dakota -----	(D)	(D)	1.7	61.5	(D)	.379	.060	.018	.009
Ohio -----	5.9	14.2	1.4	58.3	.297	.387	.058	.032	.014
Oklahoma -----	6.3	13.7	1.4	59.5	.286	(D)	.075	(D)	.016
Oregon -----	3.5	15.3	1.3	61.3	(D)	(D)	(D)	(D)	(D)
Pennsylvania -----	5.2	15.1	1.5	71.8	.268	.380	(D)	.016	.016
Rhode Island -----	2.6	14.7	1.6	63.5	.262	.344	.088	.010	.018
South Carolina -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Dakota -----	(S)	(S)	(S)	(S)	(S)	(D)	(D)	(D)	(D)
Tennessee -----	5.1	11.2	1.8	54.6	.252	.461	.069	.016	.014
Texas -----	7.9	14.9	1.6	60.2	.305	.350	.093	.023	.019
Utah -----	6.2	13.4	1.4	55.6	.301	.414	.073	.015	.025
Vermont -----	5.2	12.1	1.8	60.0	.258	.421	.077	.031	.013
Virginia -----	8.6	14.5	1.5	54.4	.338	.337	.051	.020	.017
Washington -----	4.0	11.6	1.3	47.6	.304	.384	.054	.024	.024
West Virginia -----	4.3	14.6	1.7	48.7	.346	.310	(D)	.022	.011
Wisconsin -----	4.5	13.1	1.3	51.4	.320	.391	(D)	.031	.034
Wyoming -----	4.4	12.3	1.4	56.5	.255	.418	.049	.043	.014

# APPENDIX A.

## Explanation of Terms

**Construction**—Is composed of three broad categories: (1) new construction, (2) additions and alterations, and (3) maintenance and repair. "New construction" includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators and escalators. "Additions and alterations" includes construction activity making structural changes to existing facilities. "Maintenance and repair" includes the restoration of existing buildings or other structures or their service facilities, including the replacement of integral parts. Repainting, repapering, reroofing, etc., are also included.

Construction includes:

- special trade contracting such as electrical work, painting, and carpentering on mobile structures (trailers, mobile homes, and ships).
- support activities by construction contractors on mineral properties, except the following: sinking mine shafts; tunneling and shoring mines; erection, repairing and dismantling of drilling rigs; and building well foundations.
- the physical development of land for purposes other than agriculture.
- demolition of existing structures.

Construction does not include:

- shipbuilding.
- manufacturing of other mobile structures.

**Number of establishments in business during year**—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

**Number of establishments in business at end of year**—Includes all full-year or part-year establishments that were in business at the end of 1982.

**Proprietors and working partners**—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners. The partnership factor was based on information received during a large-scale test conducted in prior years.

**All employees**—Comprised all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid-sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are excluded.

Total employment is calculated for each establishment and is derived by summing the construction workers data reported for March, May, August, and November, dividing by 4 and adding to it the number of other employees reported for March.

This approach was designed to simplify the questionnaire format and the reporting requirements of respondents. The industry average of these four selected pay periods approximates very closely the average employment for the year that would be obtained by using pay periods in all 12 months for almost all of the construction industries.

**Construction workers**—Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working supervisor level are excluded from this category but are included in the "other employees" category.

**Other employees**—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working supervisor level.

**Construction worker hours**—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1982 and are published in the detailed statistics tables.

**Payroll**—Includes the gross earnings paid in the calendar year 1982 to all employees on the payroll of construction establishments. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Payroll data were collected and tabulated for the employment categories described above and separately for the first quarter of 1982.

Payroll data for auxiliary establishments of multiestablishment companies are not included in these totals. Selected data for these types of establishments are found in the industry summary report and the 1982 Enterprise Statistics reports.

**Employer costs for fringe benefits**—Represents expenditures made by the employer during 1982 for legally required and voluntary fringe benefit programs for employees. These include employers' Social Security contributions, unemployment compensation, workers' compensation, State temporary disability payments, union negotiated benefits, life insurance premiums, pension plans, insurance premiums on hospital and medical plans, and welfare plans.

**All business receipts**—Includes all receipts from general contracting, special trade contracting or subcontracting, and land development and improvement work. It also includes all receipts from the sale of land (not recorded as fixed assets of the reporting establishments) and buildings built for sale. All other receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.) are also included.

Money obtained during the year in the form of construction loans is not treated as receipts, nor is money realized from the sale or other disposition of the establishment's fixed assets.

Also excluded are receipts from operations in foreign countries and nonoperating income such as interest and dividends.

All business receipts are broken down in the following detail:

**Total construction receipts**—Includes all receipts during 1982 for construction work performed by general contractors, special trades contractors or subcontractors, and for land development and improvement work. Included are receipts for maintenance and repair construction work, as well as for new construction and additions and alterations. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include in this item their 1982 receipts from the sale of buildings and other structures built for sale, excluding from these receipts the value of the land (see "land receipts" below) but including the value of any improvements an establishment made to the land. Builders who traded a new home or other building for an existing one were to include the estimated value of the trade-in.

Also included in construction receipts were fees received as sponsors of joint ventures and fees received as agents for owners (for construction work).

Excluded were receipts for separately definable architectural and engineering work done by the reporting establishment for others and receipts from the rental of equipment to others (see "other business receipts" below).

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies for construction purposes were instructed to include as construction receipts both the receipts for the installation and the receipts for the value (selling price) of the items installed. (Receipts for the selling price of items sold but not installed were to be included in "other business receipts.")

**Receipts for work subcontracted in from others**—Covers receipts during 1982 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total construction receipts accounted for by such work, and the percentages reported were applied to the reported construction receipts to develop a value for this item.

**Land receipts**—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in construction receipts.)

**Other business receipts**—Includes business receipts not reported as construction receipts or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

**Net construction receipts**—Derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

**Value added**—Derived for each establishment, value added is equal to all business receipts, less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, value added is modified to be equal to all business receipts less land receipts; payments for construction work subcontracted to others; and payments for materials, components, supplies, and fuels. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

**Selected payments**—Represents the total of payments for materials, components, and supplies; payments for construction work subcontracted to others; and payments for selected power, fuels, and lubricants. Capital expenditures and rental payments for machinery, equipment, and structures are shown elsewhere.

Payments for materials, components, and supplies include:

- total payments made by the reporting establishments during 1982 for the purchase of all materials, components, and supplies, except fuels, used for construction. (Supplies include expendable tools charged to current accounts.)
- freight and other direct charges incurred by the reporting establishment in acquiring the materials, components, and supplies are also included, as are the value of materials, components, and supplies obtained from other establishments of the respondent's company. Payments represent the amount paid after discounts.
- payments for materials, components, and supplies used by the reporting establishments in the construction of new plants or equipment for themselves, which are chargeable to their fixed assets accounts, are included in this item as are payments for materials bought and resold to others.
- payments made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Payments for materials, components, and supplies include only payments for physical goods and represent the amount paid after discounts.

Excluded from this item are:

- services such as advertising, telephone, telegraph and cable, insurance, developmental and research services of engineering, management, marketing, and other professional consultants, unless their costs are included in the prices paid for materials.
- overhead items such as depreciation charges against plant and equipment, rent and rental allowances, interest payments, royalties, patent fees, payments for land, rental of construction machinery or equipment, and construction work let out to other construction contractors.
- materials furnished to contractors by the owners of projects.

Payments for construction work subcontracted to others include:

- all payments made during 1982 for construction work subcontracted out to other construction contractors. General contractors were instructed to include payments to subcontractors. Builders were instructed to include payments made to general contractors and also payments made directly to subcontractors.
- special trade contractors were instructed to include payments made to other subcontractors. The payments made by the reporting establishment for its purchases of materials, components, and supplies are not included here, even if they were provided to a subcontractor for his use. Such purchases are reported under a separate category, "payments for materials, components, and supplies." However, if payments to subcontractors covered materials purchased directly by the subcontractors, then the total of such payments (including material charges) should have been reported in this item.

Excluded from this item are:

- payments made for the rental of construction machinery or equipment.

Payments for selected power, fuels, and lubricants include:

- payments made for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the parent company.
- payments made for natural and manufactured gas, fuel oil, coal and coke products, etc.

Dollar amounts include freight and other direct charges.

**Storage capacity for fuels**—Data for storage capacity for fuels were collected from heavy construction contractors, other than building construction contractors. Data are published in the detailed statistics tables for the heavy construction industries, i.e., SIC 1611, SIC 1622, SIC 1623, and SIC 1629.

**Rental payments for machinery, equipment, and structures**—Includes all payments made during 1982 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes payments for the rental of land. It also excludes payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized. Such payments are included in "capital expenditures." It also excludes payments made under agreements which, in effect, are true subcontract construction arrangements; such payments are included in payments for "construction work subcontracted to others."

**Selected purchased services**—Includes all payments made during 1982 for communication services purchased from other companies or from other establishments of the parent company. It also includes the cost of all repairs made to structures and equipment by outside firms, or from other establishments of the parent companies. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increases the value of property, or the cost of adapting it for another use.

**Fixed assets and depreciation**—Refers to the value of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on fixed assets and depreciation were collected separately for: (1) structures, additions, and related facilities; (2) machinery and equipment; and (3) the total of both.

Respondents were asked to report the gross book value-acquisition cost (original cost or other basis) at the beginning and at the end of 1982. They were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982.

**Capital expenditures**—Refers to all costs actually incurred during 1982 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment. Included are payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized.

Respondents were instructed not to include any expenditures actually made prior to, or after 1982. For example, if they began construction of a building for an establishment's own use before 1982 and did not complete it until after 1982, they were to report only those costs actually incurred during 1982.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

- **New structures and related facilities**—Includes the total expenditures during 1982 for new buildings and structures, major additions and alterations to buildings and structures, and other facilities for the reporting establishment's use (such as roads, docks, tracks, parking lots, and fences). It excludes expenditures for land.
- **New machinery and equipment**—Includes expenditures for new machinery and new equipment. This item also includes capitalized repairs and improvements to used machinery and equipment.
- **New automobiles and trucks intended primarily for highway use**—Includes expenditures for new automobiles and trucks and capitalized repairs and improvements to used automobiles and trucks.
- **Used structures and related facilities**—Covers expenditures for used structures and related facilities acquired from others.
- **Used machinery and equipment**—Includes expenditures for used machinery and equipment acquired from others, including automobiles and trucks. Capitalized repairs and improvements to such equipment are reported as new machinery and equipment.

**Value of inventories**—Includes all of the materials and supplies that are owned and located within the United States. Excludes materials which are owned by others, but held by the reporting establishment.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

**Establishments building structures on their own land for sale (operative builders)** were instructed to include the value of materials on hand at the end of the year but not to include the structures not yet sold or under construction.

Land subdividers and developers were instructed to include the value of materials on hand at the end of the year, but not include land not yet sold or under construction.

**Ownership of construction projects**—This item shows the distribution of construction receipts by ownership of the project—Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken and not to the financing. Government owned projects cover those owned by the Federal, Commonwealth, or local governments including public authorities and special districts.

**Types of construction**—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1982. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. However, complex projects consisting of two or more types of buildings, structures, or other facilities are difficult to classify because sufficient information is seldom available. Therefore, respondents were told to classify complex projects by the major function of the total complex.

In addition, heavy construction contractors and special trade contractors were requested to report the percentage of construction receipts derived from new construction work, including additions and alterations, and from maintenance and repair work for each of these types. General building contractors were requested to report the percentage of construction receipts derived from new construction work, from additions and alterations, and from maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of new construction, additions and alterations, and maintenance and repair.

#### Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (includes townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures other than containing two or more housing units.
- **Other residential buildings**—Includes hotels, motels, dormitories, and other nonhousekeeping residential structures.
- **Bank buildings and other financial institutions**—Includes all buildings which are used primarily to house banks or other financial institutions.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, miniwarehouses, and other storage buildings.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Note that heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are NOT included in this category, but are shown under nonbuilding construction.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices.
- **Other commercial buildings such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, complete shopping centers, department stores, drug stores, restaurants, public garages, and auto service stations.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.

- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social, and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes buildings which are not classified elsewhere, such as fire stations, bus and air passenger terminals, hangars, etc.

Nonbuilding construction:

- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Elevated highways**—Includes roads, highways, and causeways built on structural supports.
- **Bridges**—Includes viaducts, trestles, and overpasses.
- **Tunnels**—Includes highway, pedestrian, and railway tunnels, etc.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.

- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, dikes, and levees.
- **Power and communication transmission lines, towers, and related facilities**—Includes telephone and telegraph lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.
- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipplers and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

**Location of construction work**—This item includes data for each State in which respondents engaged in construction work and the extent (percent of construction receipts) of that work.



# APPENDIX B. Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
<b>15</b>	<b>BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS</b>	<b>17</b>	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.</b>
<b>152</b>	<b>General Building Contractors—Residential Buildings</b>	<b>173</b>	<b>Electrical Work Special Trade Contractors</b>
<b>1521</b>	General Contractors—Single-Family Houses	<b>1731</b>	Electrical Work Special Trade Contractors
<b>1522</b>	General Contractors—Residential Buildings, Other Than Single-Family Houses	<b>174</b>	<b>Masonry, Stonework, Tile Setting, and Plastering Special Trade Contractors</b>
<b>153</b>	<b>Operative Builders</b>	<b>1741</b>	Masonry, Stone Setting, and Other Stonework Special Trade Contractors
<b>1531</b>	Operative Builders	<b>1742</b>	Plastering, Drywall, Acoustical and Insulation Work Special Trade Contractors
<b>154</b>	<b>General Building Contractors—Nonresidential Buildings</b>	<b>1743</b>	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
<b>1541</b>	General Contractors—Industrial Buildings and Warehouses	<b>175</b>	<b>Carpentering and Flooring Special Trade Contractors</b>
<b>1542</b>	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	<b>1751</b>	Carpentering Special Trade Contractors
<b>16</b>	<b>CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—GENERAL CONTRACTORS</b>	<b>1752</b>	Floor Laying and Other Floorwork Special Trade Contractors, N.E.C.
<b>161</b>	<b>Highway and Street Construction, Except Elevated Highways</b>	<b>176</b>	<b>Roofing and Sheet Metal Work Special Trade Contractors</b>
<b>1611</b>	Highway and Street Construction Contractors	<b>1761</b>	Roofing and Sheet Metal Work Special Trade Contractors
<b>162</b>	<b>Heavy Construction, Except Highway and Street Construction</b>	<b>177</b>	<b>Concrete Work Special Trade Contractors</b>
<b>1622</b>	Bridge, Tunnel, and Elevated Highway Construction Contractors	<b>1771</b>	Concrete Work Special Trade Contractors
<b>1623</b>	Water, Sewer, Pipe Line, Communication and Power Line Construction Contractors	<b>178</b>	<b>Water Well Drilling Special Trade Contractors</b>
<b>1629</b>	Heavy Construction Contractors, N.E.C.	<b>1781</b>	Water Well Drilling Special Trade Contractors
<b>17</b>	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS</b>	<b>179</b>	<b>Miscellaneous Special Trade Contractors</b>
<b>171</b>	<b>Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors</b>	<b>1791</b>	Structural Steel Erection Special Trade Contractors
<b>1711</b>	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	<b>1793</b>	Glass and Glazing Work Special Trade Contractors
<b>172</b>	<b>Painting, Paper Hanging, and Decorating Special Trade Contractors</b>	<b>1794</b>	Excavating and Foundation Work Special Trade Contractors
<b>1721</b>	Painting, Paper Hanging, and Decorating Special Trade Contractors	<b>1795</b>	Wrecking and Demolition Work Special Trade Contractors
		<b>1796</b>	Installation or Erection of Building Equipment Special Trade Contractors, N.E.C.
		<b>1799</b>	Special Trade Contractors, N.E.C.
		<b>6552</b>	<b>SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES</b>

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# **APPENDIX C.**

## **Geographic Divisions and States**

### **NEW ENGLAND STATES**

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

### **MIDDLE ATLANTIC STATES**

New Jersey  
New York  
Pennsylvania

### **EAST NORTH CENTRAL STATES**

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

### **WEST NORTH CENTRAL STATES**

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

### **SOUTH ATLANTIC STATES**

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland

### **SOUTH ATLANTIC STATES—Con.**

North Carolina  
South Carolina  
Virginia  
West Virginia

### **EAST SOUTH CENTRAL STATES**

Alabama  
Kentucky  
Mississippi  
Tennessee

### **WEST SOUTH CENTRAL STATES**

Arkansas  
Louisiana  
Oklahoma  
Texas

### **MOUNTAIN STATES**

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

### **PACIFIC STATES**

Alaska  
California  
Hawaii  
Oregon  
Washington

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| <input type="checkbox"/> Manufacturing           | <input type="checkbox"/> County Business Patterns  | <input type="checkbox"/> International Statistics |
| <input type="checkbox"/> Mineral Industries      | <input type="checkbox"/> Quarterly Financial Report  | <input type="checkbox"/> Geography                |
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## 1982 CENSUS OF CONSTRUCTION INDUSTRIES

Publications of the 1982 Census of Construction Industries, containing data on construction establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

### Preliminary Reports

Preliminary data from the 1982 census have been issued in 27 industry reports and 1 summary report. These reports are superseded by more detailed final reports.

### Final Reports

Final detailed statistics are issued in separate paperbound reports.

### Industry series—28 reports (CC82-I-1 to -28)

Industry series—27 reports (CC82-I-1 to -27). These reports present data for establishments with payroll and are published for each of the 27 industries included in the census. Each industry report presents 1982 data by State and for the United States on number of construction establishments; receipts; employment; hours worked; payrolls; payments to subcontractors; payments for materials, components, and supplies; payments for power and fuels; payments for selected purchased services; payments for the rental of machinery, equipment, and structures; value added; capital expenditures during the year; and depreciable assets. Limited data for 1977, 1972, and 1967 are also shown. In addition, more detailed data are shown at the U.S. level on construction receipts by type of structure (single-family houses, streets, roads, etc.). Selected data also are provided for establishments classified by their employment size and receipts size.

U.S. Summary—1 report (CC82-I-28). This report summarizes the data for establishments with payroll presented in the 27 individual industry reports and presents limited data for establishments with no payroll.

### Geographic area series—10 reports (CC82-A-1 to -10)

Division reports (CC82-A-1 to -9). These reports are published for States grouped according to the nine census geographic divisions. Much of the geographic area series data are the same as presented in the

industry series, except here they are organized by State rather than by industry. Similar data also are presented for selected SMSA's. Data are provided for establishments classified by their employment size and receipts size. Data for establishments with no payroll as well as comparative 1977, 1972, and 1967 figures, on a limited basis, also are shown.

U.S. Summary by State (CC82-A-10). This report summarizes the data, as presented in the nine individual geographic division reports, for establishments with and without payroll.

### Special series—1 report (CC82-SP-1)

Legal form of organization and type of operation (CC82-SP-1)—This report presents limited data (number of establishments, number of proprietors and working partners, total employment, and total receipts) for construction establishments without payroll, for construction establishments with payroll, and for the aggregate, classified by industry and by legal form of organization. It also contains selected statistics (number of establishments, employment, payrolls, receipts, payments to subcontractors, net construction receipts, and value added) for construction establishments with payroll, classified by industry and by type of operation (multiunit or single-unit) and by legal form of organization.

### Final Report Volume

Final paperbound reports subsequently are assembled and reissued in one clothbound volume.

### Microfiche

All published data also are available on microfiche.

## OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, manufactures, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U.S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

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